

FORMING A COMPLETE RECORD OF THE PROCEEDINGS OF ALL PUBLIC COMPANIES.
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The Costa Rica Gold Mining Company

(LIMITED).

Incorporated under the Companies Acts, 1862 and 1867.

CAPITAL £250,000, IN 25,000 SHARES OF £10 EACH.

Of which 9200 shares are offered for subscription.

Payment for these shares to be made as follows:—£1 per share on application; £3 per share on allotment; £3 per share on 1st May; £2 per share on 1st July; and £1 per share on 1st October.

Shareholders may, in anticipation of calls, pay up the whole amount of shares immediately after allotment, receiving interest at the rate of 5 per cent. per annum upon the amount of such anticipatory payments.

DIRECTORS.

EDMUND A. PONTIFEX, Esq. (Messrs. Pontifex and Wood, Shoe-lane), Chairman of the Cape Copper Mining Company (Limited)—CHAIRMAN.
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SECRETARY (PRO TEM.)—STEPHEN BURSTALL, Esq.

OFFICES:—17 AND 18, CORNHILL, LONDON, E.C

PROSPECTUS.

DESCRIPTION OF PROPERTY.

This company has been formed for the purpose of purchasing and working a series of mines secured by grants or concessions in the richest auriferous mining districts in the Republic of Costa Rica. The property comprises the mines known as "La Trinidad," "La Providencia," "San Carlos," and "San Jose," together with all such buildings and works as now exist thereon, including also certain valuable legal rights of cutting timber for all the purposes of the company, over an area of several miles in extent on each side of the property.

Costa Rica, which originally received its name owing to the extraordinary returns of gold obtained by the Spaniards who landed there, is situated on the isthmus connecting North and South America. This State, which is one of the most peaceful and progressive in Central America, possesses some of the richest gold mines in the world, and the mines this company has been formed to acquire and work are among the most auriferous in the Costa Rican Republic. They are within a few miles of the free port of Punta Arenas, on the Pacific side of the State, between which port and Panama there is constant communication by regular lines of steamers from Southampton, Liverpool, and New York.

ENGINEER'S REPORT.

The mines which this company intend to purchase have been carefully inspected by Mr. W. B. Richardson, who, after having passed with much credit through a course of study at the Royal School of Mines, and subsequently at the University of Freiberg, where he was instructed in practical mining, has since had charge of reduction works in connection with silver mines in Guatemala, and more recently of a department in the copper smelting works of the well-known firm of Messrs. Vivian and Sons, Swansea. Mr. Richardson's fitness for undertaking such an inspection of these mines as should be thoroughly efficient and truthful, and wholly free from intentional exaggeration, is established to the satisfaction of the directors by vouchers, in writing, from Dr. Percy, Lecturer on Metallurgy at the Royal School of Mines; from Professor David Forbes, and from skilled practical mining authorities. Moreover, Mr. Richardson enjoys the important qualification of being conversed in the language of the country, and well acquainted with its natural characteristics.

Mr. Richardson's report, which accompanies this prospectus and merits the careful perusal of intending investors, furnishes a full and complete detail of the mines, their produce, and their capabilities. At pages 7 and 8 of such report will be found his estimates of the profits to be made when the mines are worked on a large scale and with the best modern appliances. They are of the most satisfactory nature, and hold out the prospect of very large dividends. Making allowance for unforeseen contingencies, the possibility of which has, however, been most carefully considered and provided for, the directors believe that the shareholders in this company may confidently expect to receive most lucrative returns for their investments.

OFFICIAL ENDORSEMENT OF REPORT.

His Excellency Don Manuel Alvarado, late Minister of Public Works at Costa Rica, and since Minister Plenipotentiary at the Court of St. James's, from his own personal knowledge confirms in writing what Mr. Richardson says as to the richness of these mines, the abundance of metals, the permanency of the lodes and facilities of working, and also of the value of the ores.

VALUE OF ORE.

The opinions embodied in Mr. Richardson's report are the result of careful and minute personal inspection, and the estimate of the average value of the ores is based upon assays made from average samples collected by Mr. Richardson with his own hands, and which have been since assayed by Messrs. Johnson and Matthey, as well as by Mr. Richardson, showing the value of the gold therein at £12 12s. per ton.

FACILITIES OF WORKING.

The report also shows that these mines can be easily worked; that labour, fuel, and water are readily obtainable; and that all that is required to realise the very large profit which Mr. Richardson estimates is the erection of reduction works, with proper modern machinery and scientific appliances.

BONA FIDES OF THE UNDERTAKING.

That an undertaking should be offered to the public which holds out a promise of such large profits may suggest a doubt as to the motives of the vendors in parting

* Mr. Richardson estimates that—1. In the first 12 months after the completion of the works 20,000 tons of ore may be raised from the present openings, yielding a net profit (after paying the cost of production and reduction) of £7 per ton, or £140,000.—2. That this output may be increased to the extent of 30,000 tons in the second year, yielding a net profit of £210,000.—3. And that in the third year 40,000 tons of ore may be raised, which would yield a net profit of £280,000.

Registration of New Companies.

The following joint-stock companies have been duly registered:—

OPEN MOUNTAIN MAGNETIC IRON COMPANY (Limited).—Capital 50,000*l.*, in 10*l.* shares. For the purchase of the El Dorado Iron Mines, in the province of Malaga, Spain. The subscribers (who take one share each) are—H. S. Troughton, Malaga; J. W. Williams, 2, Clyde-road, Tottenham; William Blake-wall, Plymouth; J. W. Hutton, 20, Talbot-road, Bayswater; H. H. Severn, 1, New Broad-street, E.C.; R. Butterworth, Lindsay-place, Chelsea; and Edward Oswald, Stoke-upon-Trent.

GODBE COMPANY (Limited).—Capital 50,000*l.*, in 100*l.* shares. For the purpose of lending capital to William S. Godbe, of Salt Lake City, to enable him to make purchases of, or advances upon, mining property in Utah. The subscribers (who take one share each) are—Joshua Hutchinson, 15, Angel-court, E.C.; Percy Mifford, 32, Park-street, W.; W. Tebb, 16, Finsbury-circus; J. P. Kitchen, 25, Old Broad-street; William Baker, 5, Clement's-lane, E.C.; F. P. Obicure, The Common, Stoke Newington; and G. N. Straubridge, 3, Copthall-chambers.

NEEPSD ROLLING MILLS COMPANY (Limited).—Capital 25,000*l.*, in 10*l.* shares. For the purchase of the Neepsd Works, at Neepsd, Sheffield, lately belonging to Messrs. Joseph Peace and Co. (Limited). The subscribers are—J. M. Habershon, Rotherham, 150; George Wood, Sheffield, 200; F. Leggo, Sheffield, 85; J. Harris, Rotherham, 60; J. U. Wing, Sheffield, 25; F. E. Smith, Sheffield, 75; and C. A. Branson, Sheffield, 75.

PIRSCH SILVERINE COMPANY (Limited).—Capital 100,000*l.*, in 10*l.* shares. For the acquisition of patent rights for a combination of metals called Silverine. The subscribers (who take one share each) are—F. Robinson, 9 Colville-square; Thomas King, 45, Conduit-street, W.; John Davies, 12, Amphill-place; C. Akrell, Newport Villas, Stratford; T. Felton, High-street, Stratford; H. Ingall, Champion Hill; and John Etheridge, 27, Burton-road, Brixton.

RANGEWORTHY COAL AND IRON COMPANY (Limited).—Capital 30,000*l.*, in 100*l.* shares. To carry on the general business of a coal and iron company. The subscribers (who take 10 shares each) are—George Underwood, 21, Cornhill; E. L. Owen, Acton Lodge, near Bristol; W. Jones, 33, Abchurch-lane; H. J. Godden, 188, Fenchurch-street; E. L. Owen, jun., Acton Lodge; G. S. Underwood, Mold; and C. A. Wilkes, Cheshire, 10.

CHARLESTOWN BRICK AND TILE COMPANY (Limited).—Capital 20,000*l.*, in 10*l.* shares. Formed for the purpose of acquiring land in Yorkshire, in order to carry on a brick manufacturing business.

with it. The explanation, however, in this instance, is at once simple and satisfactory. Unlike the United States of America, Australia, and Brazil, Costa Rica is almost a maiden field for legitimate European enterprise of this nature. The native miners are unable to avail themselves of the improved machinery and modes of working, which are only attainable by the outlay of a considerable capital and by means of an experienced organisation, and hence they cannot derive the benefit of that extension of which the mines are so fully capable. So great, indeed, is the scarcity of capital, and so exorbitant the ordinary rate of interest in the country itself, that the execution of all industrial enterprise, and even of public works, involves very onerous pecuniary sacrifices.

FACILITIES OF TRANSPORT.

A Costa Rican State Railway, to connect Punta Arenas in the Pacific with Limon on the Atlantic side of the Republic, is now in course of construction, and when completed will be the means of effecting a considerable saving, both of time and money, in the operations of this company.

EARLY DIVIDENDS.

Pending the erection of the necessary reduction works and machinery, Mr. Richardson states that shipments of ore in a concentrated state can be made to England at a considerable profit, so that the directors anticipate an early payment of dividends.

MANAGEMENT.

The directors anticipate being able to make arrangements with Mr. Richardson to personally undertake the management of the company's affairs in Costa Rica.

CONTRACT—DEFERRED SHARES, &c.

A contract between John William Bennion of the one part, and William John Livingston on behalf of the company of the other part, and dated the 22nd day of October, 1872, has been entered into for the purchase of the mines, grants, concessions, &c., &c., for the sum of £200,000, of which £42,000 will be payable in cash, and £158,000 in fully paid-up shares. Of these latter £55,000 will be in Deferred or B shares; and, subject to the terms of the said contract, will not be entitled to participate in the profits of the company until the ordinary shares have received a minimum dividend of 15 per cent. per annum.

PURCHASE SHARES RETAINED.

The vendor has entered into an agreement not to sell or dispose of any of the shares to be received by him in payment for the mines until after the expiration of one year from the date of the allotment of the shares.

WORKING CAPITAL AND RESERVE.

It appears by the reports and estimates that £21,000 will be sufficient for the purchase of all the necessary machinery, reduction works, and plant. The sum of £10,000 is reserved to cover salaries and working expenses during the first six months, and £15,000 will then be left as a margin for floating capital.

Samples of the gold ore and assays, plans, and reports, and other documents, may be seen at the company's offices.

Applications for shares may be made on the accompanying form. The original reports, and the letters of Señor Don Manuel Alvarado, Dr. Percy, Professor Forbes, and others, and a copy of the Memorandum and Articles of Association, may be seen upon application at the company's offices.

Copies of the prospectus and forms of application for shares may be had of the bankers, brokers, and solicitors, and at the company's offices.

FORM OF APPLICATION FOR SHARES.

(This form must be delivered entire to the bankers of the company, who will tear off and retain the form of application for shares.)

APPLICATION FOR SHARES.

To the Directors of the Costa Rica Gold Mining Company (Limited).
 GENTLEMEN,—Having paid to your bankers, being a deposit of per share, I request you will allot to me shares in the Costa Rica Gold Mining Company (Limited), or any less number, and I hereby agree to accept such shares, subject to the regulations of the company contained in the Memorandum and Articles of Association, and to pay the further sum of per share upon allotment, and the further sum of per share at the dates mentioned in the prospectus; and I authorise you to place my name on the register of shareholders for the shares so allotted.

Name (in full)
 Profession or description
 Residence (in full)
 Date 1873 Signature

GLENARIFF IRON ORE AND HARBOUR COMPANY (Limited).—Capital 130,000*l.*, in 10*l.* shares. For the purchase of iron mines in the County Antrim, Ireland. The subscribers are—William McCandlish, 9, Victoria-chambers, 101, T. S. Begbie, 36, Walbrook, 100; J. Irwin, 10, Nottingham-place, Marylebone, 100; John Hann, 17, Telegraph-street, Moorgate-street, 100; W. Boyle, 10, Lawford-road, Kentish Town, 100; George Batters, 2, Austinfriars, 100; and Thomas Ronaldson, 31, Leadenhall-street, 50.

RIO TINTO COMPANY (Limited).—Capital 2,000,500*l.*, in 200,000 10*l.* shares, and 500 of 1*l.* For acquiring the Rio Tinto Mines, and constructing a railway from the port of Huelva to the mines. The subscribers are—Alexander Matheson, 3, Lombard-street, 200; T. C. Brice, 42, Hill-street, 200; H. M. Matheson, 3, Lombard-street, 200; H. C. Smith, Hays Wharf, 100; M. R. Smith, Lombard-street, 200; and G. Dallas, 3, Ennismore-gardens, 200.

HOLYWOOD MILL COMPANY (Limited).—Capital 30,000*l.*, in 5*l.* shares. For the acquisition of the Hollywood Mill, at Oldham.

BETTS LLANDWIT COLLIERY COMPANY (Limited).—Capital 60,000*l.*, in 10*l.* shares. For the acquisition of land for coal mining purposes in the county of Glamorgan. The subscribers (who take 1 share each) are—H. W. Dixon, King-street, Cheapside; F. Schofield, 7, Haverstock-hill House, 2400; W. Mears, 18, Austinfriars; Thomas Jervis, King-street, Cheapside; W. Williams, 23, Highbury-place, N.; G. D. H. Reece, 110, Guilford-street, Russell-square; and W. W. Morgan, 67, Barbican.

UNIVERSAL STEAM-SHIP COMPANY (Limited).—Capital 50,000*l.*, in 50*l.* shares. To carry on business as owners of steam-ships, &c. The subscribers are—M. Staniland Spilshy, 200; H. Hill, Marine-parade, Brighton, 35; C. Hill, 23, Oakley-square, N.W.; 35; E. M. Hill, Upper Hamilton-street, 35; W. Webster, 8, St. Martin's place, Trafalgar-square, 100; H. Chapman, 11, Clement's-lane, 10; and P. Wiglesworth, 10, Witham place, Boston, 2.

STAPLETON COAL AND IRON COMPANY (Limited).—Capital 50,000*l.*, in 50*l.* shares. To carry on business as miners, smelters, engineers, and colliery proprietors. The subscribers are—Sam. Cropper, 78, Cheapside, 200; W. R. Crowe, 6, Forest Hill-road, 100; A. G. Pooley, Highbury Hill House, 2400; W. A. Wilkes, Chesham, 2400; W. Jones, 33, Abchurch-lane, 2400; G. Underwood, 21, Cornhill, 2400; W. E. Barron, 29, Queen's-street, 100.

ANGLO-SWEDISH WIRE, IRON, AND MOUNT COAL COMPANY (Limited). Capital 50,000*l.*, in 50*l.* shares. For the purpose of acquiring the Marsh Ironworks, Mount, Cleckheaton, and also to carry on mining operations in the Kingdom of Sweden. The subscribers (who take one share each) are—Hunter Stephenson, Newman's-court, Cornhill; W. Brouphay, 37, Kildare-terrace, Bayswater; W. W. Walsley, 3, Newman's-court, Cornhill; P. Bhimjee, 85, Hereford-

road, Bayswater; O. G. Lambert, 7, Albermarle-street; P. B. Weston, 4, Mall; T. B. Mortimer, 37, Kildare-terrace.

SCIENTIFIC SOCIETIES' HOUSE COMPANY (Limited).—Capital 40,000*l.*, in 10*l.* shares. For the purpose of erecting lecture rooms, &c., for the accommodation of the learned societies. The subscribers are—William E. Newmarsh, 67, Lombard-street, 50; R. Brown, 11, Lombard-street, 50; F. J. Mansel, 12, Durham Villa, Kensington, 10; W. A. Gray, 24, square, 10; R. Dudley Baxter, Oakhill, Hampstead, 10; J. Clegg, 24, gardens, 50; and F. Purpy, 35, Victoria-road, Kensington.

GLAN SEVERN MINING COMPANY (Limited).—Capital 100,000*l.*, in 10*l.* shares. For the purchase of a mine in the county of Montgomery. The subscribers (who take one share each) are—W. H. Harrison, 11, Lombard-street, 10; Thomas Thompson, jun., 1, Palmerston buildings; F. H. Fabb, 1, Lombard-street, 10; Herne Hill; A. H. Miller, Epsom; S. A. Cobbett, Mitcham; J. A. Cornhill; and N. B. Cobb, 62, Cornhill.

CONGLO SLATE AND SLAB COMPANY (Limited).—Capital 100,000*l.*, in 10*l.* shares. Formed for the purchase of slate quarries in the parish of Merionethshire. The subscribers (who take five shares each) are—W. Tavistock; T. M. Matthews, Sutton House, Brent; W. Incey, Brent; G. Ginton, Ford Park, Plymouth; Thomas B. Laws, 22, Great St. Martin, Penrose, Redruth; and Thomas Horswell, East Russell, Tavistock.

BAYSE CONSOLIDATED SILVER MINING COMPANY (Limited).—Capital 200,000*l.*, in 50*l.* shares. For mining in Nevada. The subscribers (who take one share each) are—William Salk, 108, Warwick-street, R.W. Chigwell; James Bell, Victoria-buildings, E.C.; Thomas Taylor, Hill, L. Woodhouse, Farley House, Surbiton; G. G. Wells, 110, Commercial-street, 82, Denmark-road, Camberwell.

BRAMCOTE COLLIERY COMPANY (Limited).—Capital 100,000*l.*, in 10*l.* shares. For the acquisition of land in the counties of Nottingham and Derby in order to carry on mining operations. The subscribers are—Joseph Gresham House, 50 shares; A. G. Miller, 5, Great Winchester-street, 10; J. F. Downing, Whitla-road, Manor Park, Essex; T. E. Granger, 1, Kilburn; W. A. Turner, 132, Piccadilly, 1; Walter Evtit, East Molesey, 1; Holmes, 35, Finsbury-circus.

RAILWAY DEBENTURE TRUST COMPANY (Limited).—Capital 3,000,000*l.*, in 200,000 10*l.* shares. For the investment of capital upon railway property. The subscribers are—Samuel Laing, M.P., 1, Lombard-street, 1000; Arthur Kinnaird, M.P., 2, Pall Mall, 270; J. H. Lloyd, 1, Kingswalk, Temple, 250; E. W. Watkin, Northenden, 250; G. C. Wyton, Epping, 250; G. Leeman, M.P., York, 250.

GREAT AUSTRALIAN GOLD MINING COMPANY (Limited).—Capital 200,000*l.*, in 20,000 10*l.* shares. Formed for the purpose of purchasing land in the County of Wellington, New South Wales, for gold mining purposes. The subscribers (who take one share each) are—Lord Graves, Thackeray, near Denham, 44, Albermarle-street; T. P. Kavanagh, Bedford Hotel, Cornhill; G. Wylie, 44, Cannon-street; R. P. Appleyard, 28, Connaught-square, 10.

CARDIGAN IRON, STEEL, AND WIRE COMPANY (Limited).—Capital 60,000*l.*, in 10*l.* shares. To take over the Cardigan Ironworks at St. David's. The subscribers (all of Sheffield) are—W. Booth, 50; John Mathewick, 40; John Casterbrook, 50; J. Bassett, 50; John Anglemore, 100; E. Parkes, 100.

MIDDLESBOROUGH AND STOCKTON TRAMWAYS COMPANY (Limited).—Capital 50,000*l.*, in 50,000 1*l.* shares. To construct tramways in Middlesbrough and Stockton. The subscribers are—W. Whitwell, Stockton, 100; J. Redd, 50; T. Wrighton, Norton, near Stockton, 50; J. R. Rutherford, 50; J. Dunning, Middlesbrough, 100; A. G. Bell, 100; J. Stevenson, Middlesbrough, 150; and W. Hanson, Middlesbrough, 150.

SCOTT'S SEWAGE COMPANY (Limited).—Capital 50,000*l.*, in 50,000 1*l.* shares. To acquire and work patents for the treatment of sewage. The subscribers (who take one share each) are—The Duke of Sutherland, 100; Henry Cole, C.B., South Kensington Museum; J. A. Cope, 24, Great-street; W. M. Wilkinson, Lincoln's Inn-fields; W. Y. D. Scott; J. F. D. 6, Onslow-crescent; and K. Redgrave, 18, Hyde Park Gate, South.

Original Correspondence.

SOUTH ROSKEAR MINE.

SIR,—I think it is right for the encouragement of all who are interested in legitimate British Mining, as well as due to the mine and to the enterprising gentlemen connected with this property, that some account of the success which has been attained, and of the bright prospects for the future, should be known through the medium of your valuable Journal.

It is well known that South Roskear was worked for many years profitably and successfully for copper, yielding of that mineral more than any other mine in that district, and it is neighbour to the rich mines of North and South Crofty, Dolcoath, North Crofty, and Walsby. Some years ago it was abandoned, but recently the attention of a few clear-headed mine managers of the two counties was drawn to it, and, unmistakably clear—of the presence of tin in the large reef, and in paying quantities; and knowing the mine and district well, and the large capital left standing on the hanging wall of the lode most important tin, and that there are two large veins running through the lode, will, no doubt, be as equally productive for tin in the deeper levels for copper in the upper ones. The reef was taken up by him, and was the chairmanship of Mr. G. Stewart Anderson, of Glasgow, a company has been formed for working this property, and without the issue of a prospectus, the 6000 shares into which the mine is divided were immediately taken, by holders being shrewd Scotch gentlemen and practical Cornishmen. There is now supplied with a valuable plant of four steam-engines (70 in. dia., 15 in. diameter) for pumping, drawing, and stamping, with dressing, the most approved and economic plan, and with other appliances necessary for the intensive development of the property, and it is in work nearly 12 months on the surface.

Operations have been commenced on the tin lode at the 20, and 30, and produce 35 lbs. of tin to the ton, and tribute pitches are being taken. These being rapidly forked to the deeper levels, and as they are reached the lode is operated on, pitches set, and large returns made. These facts present indications that the future of this mine is a great one, and it is believed by competent tin miners of the district that South Roskear, as a tin mine, will be of the great prices of the day. The present price of tin is such, that the methods of breaking and extraction so great, that a much smaller produce will pay well now, when it could not be profitably worked. After a practical acquaintance with mining for many years, I am more convinced that the presence of tin in the lodes of the two counties (Cornwall and Devon) has been sadly overlooked; but now, thanks to the superior machinery possessed by the mine managers and agents, proper attention is being borne to this matter. There are many other properties besides South Roskear which I could name that deserves more attention in this respect. It is expected that soon after the stamps are at work large returns of tin will be made, and that South Roskear will soon be in the dividend list. Undoubtedly the shares are firmly held; and although but 30s. has been called up, they had under 10*l.* While apologising for the length of this letter, I have the permission to return in next week's Journal to the important subject of the tin surface.

WHEAL BONNY TIN MINE AND CLAYWORKS COMPANY.

SIR,—From the prospectus inserted in your columns last week I learn with pleasure that it is proposed to more vigorously work the Wheal Bonny Mine, that applications are invited for a portion of 2000 preference shares. I earnestly watched the working of this property for some years, and I can truly confirm the statements put forth in the prospectus. The mine is a work, making returns of tin at a profit. I believe that during the last year the average returns of tin have been 7 tons per month. The machinery is capable of returning double that quantity. This, it must be borne in mind, has been achieved with a capital of but little more than £1000.

I know, from a somewhat lengthy experience, that there are not many capable of showing such favourable results. Intending investors could not find easily an investment more secure, or one which will shortly (as I believe) be highly remunerative.—London, April 3.

JARVIS ISLAND SILVER COMPANY.

SIR,—I have just received a statement of accounts made up since the formation of the company, from December, 1871, to Dec. 31, 1872, which shows that in cash has been paid to the vendors, and 40,000*l.* in fully paid-up shares, 3000*l.* has been remitted to Canada, that the law charges amount to 27*l.*, and directors' fees (London and Canadian), 460*l.* It appears that 34,340*l.* has been received, of which there remains the insignificant vestige of 200*l.*, from which to be deducted 306*l.* Out of 86,000*l.* the only traceable item devoted to the mine purposes of the company is 3000*l.*, consisting of each shareholder's expenses at Jarvis Island. For this enormous outlay we have not yet in quantity, but I am glad to say that "good ore, though not yet in quantity, has been covered on the main land, and the directors indulge the hope that this will prove productive."—April 1.

[For remainder of Original Correspondence see this day's Supplement.]

Dublin, April 3.—Transactions in Irish Mine Shares have been even more contracted this week before, and have been almost wholly confined to one company, that of the Wicklow Copper Mine, which has had some changes, consequent upon various rumours as to the state of the affairs of the company. It is said the chemical works have not yielded a profit, but it is stated that the company are not able to supply the demand for ore, or to complete their contracts, and that legal proceedings are threatened to the company. The vacancy on the board caused by the retirement of the late shareholders' committee should be appointed, but the board has declined to appoint Mr. Hughes, one of the auditors, as he is fully entitled to be well according to the usual mode of proceeding, judging from what has taken place former times, and no one could fill the place better. Mining Company of Ireland shares are steady. Cape Coppers are now quoted ex div., and are rather low, now being got by the miners.—*File of Mines Times.*

FOREIGN MINES.

STAND CREEK (Gold).—G. D. McLean, March 8: We are raising the shaft, which is now about 15 ft. above the head of the tunnel about 40 ft. beyond the shaft. All is working looking the same.

W.C.—J. D. Pringle, March 9: The 250, 320, and 400 levels, all are filled up; also the 550 level. During the last month I have expended \$1000 in repairs on shaft and machinery. The repairs in shaft were necessary at the present time, as producing a small quantity of ore, and not paying half wages to the parties having it on tribute. The other party has not yet worked, and the small quantity of ore, and not paying half wages to the parties having it on tribute. The other party has not yet worked, and the small quantity of ore, and not paying half wages to the parties having it on tribute.

It is expected to have heard from the directors at the present time. I am not sure of the manner of working the mine, but I am sure of the questions of how much work is being done, and how much work is being done. I am not sure of the manner of working the mine, but I am sure of the questions of how much work is being done, and how much work is being done. I am not sure of the manner of working the mine, but I am sure of the questions of how much work is being done, and how much work is being done.

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MINING CORRESPONDENCE.

BRITISH MINES.

ABERDAUNANT.—Simon Tipton, April 2: At the 10, east and west of Hill's cross cut, the men are making fair progress in driving it. The part of the lode we are carrying is 5 ft. wide in each end, which is composed of clay-slate, sulphur, and carbonate of barytes, with spots of lead. The men continue to drive Hill's cross-cut north, but they have not yet cut through the lode; the lode is hard, and is composed of spar, carbonate of lime, and barytes. The intermediate level, driving westward from the rise over the deep adit, is worth 1/2 ton lead per fathom. It is still clearing the No. 2 adit in the east part of the set, but have not yet got through the choke; the lode is 5 ft. wide, and is composed of soft clay-slate, intermixed with branches of soft spar and carbonate of lime. I expect the round bundles will be all working by the end of this week.

ALL-Y-CRIB.—James Clint, April 3: It is impossible at present to anticipate the value of the lode 15 fathoms below adit. In driving east no footwall has been reached at the width of 9 ft., and the ore strengthens on the south or footwall side of the lode. Without doubt there is now not only a highly promising indication out certainly that a very valuable mine remains to be opened up by Alty Crib in the deep adit. I am very anxious to start men to drive west, as well as resume sinking, the former will be done immediately there is room in bottom of shaft for the men to work. In my last report I mentioned the lode being cut in the 40, or adit level east. The work that has been done here since shows a most encouraging prospect, the lode is wide, with a mixture of ore throughout, and it is my candid opinion a body of mineral will be very shortly found in opening up this level. Shall sample next week for about 35 tons of ore.

AMROSE LAKE.—Peter Tenby, March 29: I have carefully dialled the deep adit level, and find that the level driving west from the engine-shaft is fully 5 fms. north of the deep adit now driving east from the new shaft, and is on another lode. We are pushing on the cross-cut north as quickly as possible, with a full pair of men, and hope to reach the lode and make the communication in 10 or 12 days hence. The lode in the bottom end east of engine shaft is daily improving, and still letting out a large stream of water; the lode is now 2 1/2 ft. wide, and producing some rich stones of copper and blende. The lode in the end driving west has also improved in appearance, and is 3 1/2 ft. wide; we are driving this end as fast as possible, so as to come under the ore ground passed through in the level above. The deep adit west of engine shaft is now parallel with the end driving east from the new shaft; in this level we have driven through a good lode of copper for some distance. Last month we met with a slide, which split the lode into two branches. We are still driving on the south part, where we have a very good branch of ore. We are making every preparation to commence sinking the engine shaft again next month.

ASHLEIGH.—M. Whitford, Wm. Tipton, April 1: The shaftmen are busily engaged in sending up pitwork, sinking V-shaft, &c., and expect to complete the work by the end of this week. In the 20 cross-cut west of Mawr shaft, we have been cutting several small branches, with spots of lead and blende, and expect shortly to reach the north part of the lode. A stope west of No. 2 winze will yield 1 1/2 tons of lead and blende per fathom, and a stope east of No. 2 winze will yield 3 1/2 cwt. of lead and blende per fathom. The 30, east of Mawr shaft, driving south-east on a counter branch, will yield 15 cwt. of lead per fathom. A stope east of winze, 10 fms. east of the point of horse, will yield 12 cwt. of lead and blende per fathom. A stope in back of the 20, east of the point of horse, will yield 32 cwt. of lead and blende per fathom. The stope in back of the 20, east of the point of horse, will yield 40 cwt. of lead per fathom. We have commenced to drive a midway level, east of the stope in back of the 8, which is yielding about 10 cwt. of lead per fm. No particular change in the 10, driving east of Brown's shaft. We have slipped the parcel of lead ore for Messrs. Glover and Robinson, weighing 66 tons dry weight. We shall sample a parcel of blende (computed 50 tons) on Monday next.

BAMFYLDE.—S. Mitchell, April 3: The mine continues to present every appearance of future promise, the several lodes of copper, iron, and manganese are being worked, and we could desire, and all the operations at every point are proceeding in the most satisfactory manner. BEDFORD CONSOLS.—George Rowe, Joseph Mitchell, April 2: Our present prospects at the bottom, or 57 fms. level, driving west of the engine-shaft, are considerably improved during the past week, where the lode is over 4 ft. wide, of a most promising description, being composed of a very congenial capel, friable spar, mundle, and good stones of ore, from which the water is flowing very strong, sufficient to drain the upper part of the winze, sink 5 fms. deep some considerable distance in advance, which we purpose to resume sinking at the earliest convenient opportunity. The lode in the sink, or the north part is 2 1/2 ft. wide, producing very strong mundle, impregnated with good quality black oxide and yellow copper ore.

BEDFORD UNITED.—Wm. Phillip, April 3: The mine throughout continues to look equally as well as when last reported. A full report will be given in the beginning of next week for the meeting.

BELOWDA BEACON.—Geo. Stephens, April 1: Since my last report we have sunk the shaft near 3 fms.; the branch still continues carrying some tin, the water is good, and the ground is very good and easy for sinking at the present time. I intend sinking this shaft deep enough to prove the branches in clay, which run into the elvan under the rock found on the back; where this has been done I find rich deposits of tin. The other points of operation continue just the same as last reported.

BELSTONE.—James Neill, March 29: A shaft: The influx of water is still decreasing, and better progress is being made in sinking. The 50 east on north part of main lode is not quite so favourable for driving at present, chiefly composed of capel, with spots and occasional stones of yellow copper ore. Before reaching No. 2 cross-cut, I expect to see the change in the driving the intermediate level 40 fms. below above similar change occurred. In the intermediate level west part of the lode carried is easier for driving, and very congenial small nests of black ore are still being met with in this drive. The stopes at the intermediate and those at the 40, on the whole, have improved during the past week. Our dressing operations are progressing favourably, and the machinery throughout the mine is in good working order.

BLUE HILLS.—S. Bennetts, A. Gripe, March 28: The 60, east of Letcher's, continues much the same as last reported, and is there but little change to notice in the course of the shaft. The 40, east of the shaft, on the north part of the Wheel Betsy lode, is worth 1/2 ton per fm. And the same level west, on the south part, is worth 7/8 ton per fathom. The stope east of the shaft, below the 10, are worth 8/12 ton per fathom; and those west of the shaft 6/15 ton per fathom respectively.

BOG.—T. Harris, J. Barkell, April 2: The several points throughout the mine are being pushed forward with all possible speed, but we do not see any material change in our prospects since the report for the meeting last week.

BOSCASWELL DOWNS.—R. Williams: We are proceeding well, and the mine is looking satisfactory. We shall take the full quantity of tin to the smelting house to-morrow, and as far as I can see, in a fair way to increase the quantity for the present month. We set the bargains and tribute pitches on Saturday, to 96 men, and we shall require 80 or 100 more men to keep up a fair supply from under ground. The machinery is working well, and matters generally looking good.

BRYN.—S. Trudgeon, March 31: We have been working more particularly on the south or landslip lode; some weeks back we drove a cross cut south, and have intersected the lode at a deeper point; we have also driven by the side of the lode for 5 or 6 fathoms in length; the ground is easy for driving; having dialled the lode in the sink, we have driven to drive to get under the rich branch of tin gone down from above; we have cut into another place in the lode, and have splendid stones of tin. Everything on the mine is going on satisfactorily, and hope the time is near when we shall see the north and south lodes at the next level at a deeper point. In conclusion, there is no tin mine in the district that would bear a closer investigation and inspection by practical miners and engineers than the Bryn. This property cannot fail, based upon the discoveries made, to be highly remunerative to our shareholders; and, as their agent, I am pleased to be connected with it. I wish the shareholders would come on the mine, and see the success I have made, the tin rights, and the working of our machinery, and send practical mining agents to the property; the latter course would throw life and vitality into the district. I advise all my Cornish friends to secure in this mine.

BRYANBOR.—G. Spargo, April 2: The lode at the engine-shaft sinking towards the 32 has improved in appearance during the past week; owing to its porous and vuggy character, together with the very hard bed of grit to the north, our progress in sinking is very slow. However, I expect in a sink or two more to get an improvement in the ground, when greater progress will be made, and I feel certain the lode will also further improve. I have not the slightest doubt in opening up the mine, a valuable coping capel will be found, and the lode will be found in the fine width of the lode will be ascertained. In cross-cutting the lode south in the winze from the 12 to the 22 the lode yield good lead ore. I see no sign of footwall, but expect to see more in this part by the ensuing week. Surface: The cottages are ready to receive the roof, and the slaters are expected to commence slating to-morrow. The tramway from the shaft to the dressing-floors is now in thorough working order, and everything will be forwarded as fast as possible, so as to commence dressing. The new hauling-machine, &c., is daily expected at the railway station, and on its arrival no time will be lost in its erection, which I am most anxious to get done, as the present machine is at its end of power. Other parts of the mine are without alteration since my last. Saturday last being our pay-day, everything went off satisfactorily.

BUDNICK CONSOLS.—J. Rawlings, April 2: We are preparing to put in foot-wall in one of the shafts, with a view to raising lead and blende; large quantities were raised from that part of the mine during former workings, and I believe it will pay well. The place we opened upon, referred to in my last report, is likely to turn out well. We sold a parcel of tin on April 29, at 54/10s. per ton. There is no change in any other part of the mine.

BURROW AND BUTSON.—J. Christopher, March 29: The leader of jack in the 20 fms. level, mixed with copper and lead, of which we get some fine stones, is now over 2 ft. wide, and, assuming our blende to be worth 5s. per ton, is of a present value of at least 15s., and the aggregate produce of the points fairly on a ton of 5s. The leader at the cross-course, No. 3 east, is 6 in. wide, of good jack. To the west of this cross-course we have not cut the lode yet, but are getting into branches of blende. As said before, the men have been taken from the end east of new east shaft to assist at the engine-shaft; this is going on well, and I have set it to nine men, to timber it to the bottom of the 40 fms. level, for the round sum of 40s., giving them all the assistance in men they may reasonably require. This afternoon we started the balance-hoist, the first that has ever been attached to the 60-inch cylinder pumping engine, which is now working exceedingly well and smoothly, saving costs, and, no doubt, pitwork also. The dresser of ore is busy preparing for a first sale, before our steam-crusher goes to work. On Mr. Von Ester's recommendation a contract has been entered into to-day with an experienced man to overhaul our burrows for ore from Williams's shaft, inclusive, west at a tribute of 12s. in 1/2, he paying all cost, except for crushing such ore as he may think proper, the dressing to be done at the western or Butson end of our mines, in order not to interfere with our regular dressers and dressing floor, near the engine-shaft and crusher. This is progressing also very satisfactorily, the boiler having been put in its place to-day. A week's moderately dry weather would greatly expedite this, but these last two days have not been very fine. At the sale at the Chiverton Moor Mines I purchased jiggering machines, which came home this week. The 30 fms. level is not yet cleared, because the stuff cannot be drawn up while the engine-shaft is being timbered. The 20 fms. level west is being driven by four men, and improving. Tonkin's shaft is cleared sufficiently to let air into the 20 fms. level, and I hope in a day or two to be able to effect a complete communication. The lode standing east and west in this shaft is 4 to 5 ft. wide, containing blende and copper, and I shall begin raising ore here as soon as I can get the stuff here removed. In Williams's shaft, the tin ore which is erecting, and I shall commence securing it in a day or two, when I expect to find a great deal of ore ground. If any of our shareholders doubt the extent of our deposits of jack or blende, they should come and take a view of the heaps about the gardens and roads near our

mines, where large blocks of nearly solid ore, to the extent of scores of tons, have been used in building them, showing of how very small value it was when the mines were last worked. By the mining newspapers I see that jack has brought on an average for the last six months 1/2s. 6d. more per ton than copper.

CADYKNOX.—T. Hodges, April 2: The 80, west of the 100, is a very hard lode, and we are now into the north part of the lode, which is very hard. This is encouraging, as the lode is always hard where it is more productive than usual; therefore we may expect an early improvement here. The stope in the bottom of the 50, east of Evans's winze, has improved, and is now worth fully 12s. per fm. Richards's winze continues without change.

CAPE CORNWALL.—R. Pryor, J. Davey, April 1: The 100 cross-cut to drive north of the engine-shaft by six men, at 18s. per fathom. The 100 cross-cut being at present in contact with a hard floor of ground, which renders it more and more difficult for driving, but we are encouraged in the hope of soon having a favourable change, and are of opinion it will not continue long in its present hard state to impede our future progress in getting to new lode. Pay and setting passed off well.

CAPPAGH.—W. Thomas, March 31: Saturday being setting day I set the following bargains:—The 115 fms. level, east of skip-shaft, to six men, for the month, at 11/ per fathom; also to the same men a lump bargain for 11/ to take down the south side of the level east of shaft 13 fms. long, 9 ft. high, and 6 ft. wide. This will include the south lode and all the cross veins of rich ore intervening between the two lodes; it will also finish the pit at the east end of the shaft. In the 115 fms. level, east of the lode is underlying faster than usual towards the south lode, so that by the time the 13 ft. of the south side is taken down I expect the lodes will be near each other. Having to fix still in the back of this level we shall after a few days set the stope in the back to four or six men; this is rich ore ground; and the stopes and ends are about the same value as reported this day month. The 115 fms. level, west of skip-shaft, must be holed to Buckley's winze before we can resume sinking the shaft, as all the water from the shaft will have to be discharged through the winze; and when the level is holed, and the skip road brought down to the 115, the lode now standing will pay. I have, therefore, set the 115 fms. level west to four men, for the month, at 11/ 11s. per fathom. The communication would, of course, be much sooner effected by driving the both ends to meet. I have set the 104 fms. level west to two men, for the month, at 9s. 10s. per fathom: this is a promising end.

CARDIGANSHIRE OLD BOG.—J. Overton, April 2: Such good progress has been made in forcing the water in the old shaft and placing in new pitwork, that we have now the 12, and entered it on the night of March 31. The east drive here is 26 fms. and in a few days it will be cleared, when we will be able to say more about it. We find several strings of lead in the backs of this level, which must be proved. The western end is much broken in consequence of former workers using bad timber. The evidence we have fully bears out the report that considerable quantities of ore were raised from here in the old time.

CASTLE AN DINAS.—S. Symons, April 3: The repairs necessary in consequence of the breakage of the machinery have been promptly attended to, and the engine is again in full work, and by to night I expect the water will be in fork to the 25, when the driving of the 25 west north will be resumed, and the work prosecuted with all dispatch. The clearing of the 15 east still continues; we find the ground to be crushed very badly in some places, which makes it rather slow for clearing. Every exertion is put forth that it may be completed in the shortest time possible. The stopes continue to yield very good work for tin, with very rich and strong tin branches gone down. I consider the quality greatly above the average, and what might reasonably be expected at the depth we are working. Again I urge upon the shareholders the importance of the works of extension now being fully carried out. It is decidedly pronounced by all the experienced men who have inspected the mine that if it be worked at a greater depth than at present the result would be a lasting and profitable mine being opened up. This has been proved by actual working at a depth of only 25 fms.

CASTLE GATE.—Thomas Parkyn, April 3: Brenton's lode is still yielding good work for tin, notwithstanding we are only 4 fms. below the surface. As I reported a fortnight since, I still think it advisable to put up a little steam engine and sink a shaft 15 or 20 fms. below the present adit level, when I think you would at once have a paying mine, the present indications warrant this opinion. I have fixed upon the spot for the shaft, engine, &c. I might say that the shaft will be sunk with great dispatch, the ground being soft killas, and near to the granite, so that the position of the mine is very good.

CATHEDRAL.—J. Michell, April 3: All the necessary preparations are being made for the starting of Colonel's engine and clearing the adit: the latter, when clear, will enable us to resume sinking Colonel's engine-shaft, which we anxiously look forward to. Doctor's lode, at the adit end driving west of Doctor's shaft, is, I believe, skimming a course of copper ore, which will shortly be proved by sinking a winze in the bottom of the adit level.

CRENVER AND WHEEL ABRAHAM UNITED.—Wm. Kitto, Wm. Thomas, April 2: Setting Report.—Sturt's Engine Shaft: The summen have taken a contract to fix the plunger lift at the 215 fms. level, to cut hitches for bearers, ground for eastern plat, put in pent house, and get everything ready to sink. To drive the 215 end west, on the old lode, by six men, the month, at 14s. per fathom: the lode is 1 ft. wide, unproductive. Crenver Shaft: To rise in the back of the 160, east of shaft, on the old lode, by four men, the month, at 11/ per fathom: the lode is 2 ft. wide, yielding a little tin, but not enough to drive. The 130 end, to drive east on the old lode, by four men, the month, at 8s. 10s. per fathom: the lode is 1 ft. wide, yielding a little tin, having a kindly appearance. St. George's Shaft: To drive the 203 end west, by six men, the month, at 13s. per fm.: the lode is 3 ft. wide, yielding 1 1/2 tons of copper ore per fathom. To sink a winze, west of shaft, by six men and two boys, the month, or hole, at 8s. 10s. per fathom: the lode is 4 ft. wide, and worth 80s. per fathom, for 12 ft. long. Wolf's Shaft: To stop the back of the 190 cross-cut, south of shaft, by six men, the month, at 3s. per fathom, for 3 ft. high, in order to discharge the water from the shaft. To drive the 120 end, to drive east on the old lode, by four men, the month, at 12s. per fathom: the ground is improving in appearance. Vivian's Shaft: To drive the 200 end east, on the old lode, by nine men, 4 fms., to get under the winze, at 6s. per fathom: the lode is 4 1/2 ft. wide, worth 40s. per fathom. To drive the 210 end east, on the old lode, by six men, the month, at 9s. 10s. per fathom: the lode is 5 ft. wide, yielding good stones of copper ore. Pelly's Engine Shaft: To sink below the 234 fms. level, by twelve men, at 40s. per fathom: the ground at present is disordered. To drive the 234 end east, by six men, the month, at 12s. per fathom: the lode is split and disordered. To drive the 234 end west, by six men, the month, at 13s. per fathom: the lode is 3 ft. wide, yielding 1 ton of copper and some tinstuff per fathom. To sink a winze, east of shaft, below the 220 fms. level, by six men, to hole, at 14s. per fathom: the lode is 2 ft. wide, yielding 1 ton of copper ore and some tinstuff per fathom. To drive the 220 end east, by six men, the month, at 8s. per fathom: the lode is 3 ft. wide, yielding good stones of copper ore, but not enough to value. Blower's Shaft: To sink below the 210 fms. level, by four men, to hole, at 8s. per fathom: the lode is 5 ft. wide, unproductive. To rise in back of the 200 fms. level, against Richards's shaft, by four men, the month, at 7s. 10s. per fathom: the lode is small and poor. Richards's Shaft: To sink below the 180, by six men, the month, at 7s. 10s. per fathom: the lode is 5 ft. wide, poor. The 170 end, to drive west, by four men, the month, at 4s. 10s. per fathom: the lode is 1 ft. wide, producing good stones of tin. Yeate's Shaft: To drive the 95 end west, on the north lode, by four men, the month, at 6s. 10s. per fathom: the lode is 15 in. wide, yielding a great deal of mundle and stones of copper ore, having a better appearance than for some time past. We sampled yesterday 160 tons 10 cwt. 3 qrs. of tinstuff. The amount of sale shall be sent you next week. There are employed this week: On tutwork, 153 men; on drive, 36 men; at surface, 46 men. Total, 235 men.

CWM DWYFOR (Copper and Silver Lead).—T. Collier, March 29: We have good copper in the south cross-cut, quite unlike anything we have hitherto seen; if it is the lode named yesterday we have another copper lode besides the great south copper lode, and the great silver-lead lode within 3 or 4 fms. ahead.

March 31: We have cut through the copper in the south cross-cut: it is 1 ft. wide. The end is now in clay slate. I am of opinion that this will be found to be a horse of ground between the lode, and that we shall get copper on the south side. In the north cross-cut we have a small branch of copper.

April 2: Looking at the men cut into a very strong lode in the south cross-cut, composed of mundle and clay slate, with copper and pyrites mixed throughout. We have had several blasts to-day, and have cut into it 3 ft., but see no indication of the south wall.

April 3: In the north cross-cut we have occasional branches of copper, but not of importance. In the south cross-cut the lode I named yesterday is very large; we have cut into it 5 1/2 ft., and see no indication of the south wall; it consists of spar, mixed with clay slate, a large quantity of pyrites and copper ore, and a branch of silver lead 2 in. wide, and is by far the strongest lode I have yet seen here. The great lode in the south cross-cut, at the end of this level, is the lode named yesterday. We have let a rise in the roof of this level to meet an old sink under the deep adit level, where it is said there is a good lode of ore, and when completed to the bottom of the said sink, which is about 3 1/2 fathoms deep, it will ventilate the 10 east and west of the shaft. The lode in the 10 west is very promising, worth at present for lead and blende ore about 11 cwt. per fathom. No. 1 stope, in the back of the deep adit, is yielding from 11 to 15 cwt. of lead and blende ore per fathom. No change to notice in the shallow adit level. We started the new patent jigger yesterday, and it does its duty well, but we must have another before this part of dressing is properly done.

John Williams, March 28: To-day being our pay, measuring, and setting day everything passed off satisfactorily. The following bargains have been set: The shallow adit set at 7s. per fathom, the takers to wheel their stuff out to surface; the lode is much the same as last reported. No. 2 stope has been set at 4s. 10s. per fathom: the lode is worth from 12 to 14 cwt. of lead and blende per fathom, the takers are to wheel their stuff. No. 1 stope is much the same as last reported, but has not been set yet. The 10 west to drive has been set to four men, at 7s. 10s. per fathom, the takers to meet the shaft at the plat: the lode is worth from 10 to 15 cwt. of lead and blende per fathom. The 10 east we stop for the present, and put the men to rise below the old shaft that is going below the deep adit to ventilate the mine, and to prove the lode, as they say that there is very good lead in the bottom of this shaft. We started our crusher and jiggers to-day, and am glad to inform you that they are doing their work well, as we only put the poorest stuff through it, and were surprised to see the lead and blende they take out of it. In fact before we put it through the crusher we could hardly say there was any lead in it. The only thing to do now is to put up the other two jiggers, as we have the frames already fixed, and by doing so we shall do away with a great deal of labour, and will be a great dispatch in the quantity of stuff for the market, and I would strongly advise you to put the other two up as soon as possible, but you can see when you come down, which we shall point out to you on the mine better than in writing; and, in conclusion, our pumping and drawing machinery are in good condition, and do their work well, and also our dressing machinery.

CWMYSTWTH.—M. Reh 24: In Gill's lower level west, on Henry Taylor's lode, the lode is 2 ft. wide, composed of a clay-slate and spar, with occasional small spots of lead ore, but not to value. In the winze in the bottom of the Day level, on the Kingside lode, the lode is small and poor. No lode has been taken down in the Day level east, on the north lode, since our monthly report, but shall do so previous to our next setting day: the ground at present is favourable for driving. Since our monthly report we have cut a joint in the cross-cut north of the Day level, which we think is the Kingside lode, but it is poor: we still continue to drive, to prove there is anything to value standing on the north side. In the cross-cut south in Alderson's level we are getting small strings of lead ore in the cross-cut, but have no signs of the south wall of the lode as yet. We have not set anything of value in the cross-cut south in the Level Fawr, but still continue to drive. Our stopes and tribute pitches are in good working order. We sampled 20 tons of lead ore on the 15th instant.

DE BROKE.—Wm. Michell, jun., March 27: The lode in the 25 fms. level east is now showing nice spots of ore. In the shallow level east, on the north part of the main lode, the end is worth 10 cwt. of lead ore per fathom. In the 35 fms. level, west of No. 3 shaft, the part of the lode driven on is not producing so much ore as

[For remainder of Foreign Mines, see to-day's Supplement.]

OMAGNO (Silver).—The letters of allotment of this company were yesterday, the present issue of capital having been fully taken. Mr. Godbe, who had arranged to sail for America in the ill-fated steamer Atlantic, has been delayed by business matters, left Liverpool in the steamer Republic. WILCOVE COPPER MINES (South Australia).—In a few days the whole of the purchase-money, 15,000—15 is taken in shares, and the remainder in the form of a loan made non-transferable for 18 months, the general control of the company, and the appointment of the officers, will also be in their hands. The property has been reported upon by F. Ulrich, F.G.S., Consulting Mining Geologist and Engineer, on the Resources of Port Augusta; Mr. J. B. Austin, author of the "Mines of Australia," and Mr. A. McDonald.

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of gold by three men, at 6f. 10s. per fathom; the lode is 1 ft. wide, worth 7½ pt. per ton. This level to drive east of guide by two men, at 4l. per fathom; lode worth 4l. per fathom. The next level to drive west of guide by two men, at 4l. per fathom; lode worth 4l. per fathom. The next level to drive west of guide by two men, at 4l. per fathom; lode worth 4l. per fathom. The next level to drive west of guide by two men, at 4l. per fathom; lode worth 4l. per fathom. We also set 40 tribute pitches at tributes varying from 6s. 8d. to 16s. in 1l. Our pay and setting passed of well.

ST. BLAZEY CONSOLS.—N. Ennor, March 31: I visited these mines on the 25th and 29th inst. The sett having been described by others, I need only say it is large and rich, containing a quantity of east and west lodges, numbering about 100. Many of them are large and rich, and contain a great deal of granite formation, costing from 2l. to 4l. per fathom to work them—in fact, the hills are to every appearance permeated with tin. At a small distance from your sett I saw a 24-head stamps working, they taking all the hill as it came, which produced about 2lbs. of tin per ton, and they paid a profit of over 20¢ per month. I may remark they follow no lode, but take the hill nearly all as it comes. Then I have to remark upon the principal features of your grant. 1st. Say you have 40 lodges, all yielding 100 lbs. of tin per ton, to say nothing very cheaply, this, at a matter of course, would be a good dividend, and then sink deeper to dig out new ground as the old is taken away. There is no fear of the mines paying under the present price of tin if well managed.

TAMAR VALLEY.—John Goldsworthy, April 3: Weston's engine-shaft sinking below the 57 is being forced on with all speed, and is now down 11 fms.; the lode is 3 ft. wide, composed of friable spar, mundle, and fluor spar, spotted with silver-lead ore. The stratum contains a mixture of fine silver-lead, which is considered in this district to be the best quality of lead ore. The lode proving productive, the prospecting party has made no material alteration in the tribute department since last report. Pit-work and machinery working well.

TANKERVILLE.—Arthur Waters, April 3: Watson's shaft, below the 130, is down 8 fms. 2 feet 6 in.; there is a cavity of the right sort in present bottom, with a very rich course of lead ore accompanying it. We shall be deep enough for the 140 by the end of next month (this probably means the end of April), and it is evident that when the drivages are made a very rich section of ore ground will be available for stopping there. The shaft is now nearly 7 fms. deep, fast copper, but producing little or no lead. The lead is found wide in the ends and bottom of it is not a sign of cutting out in depth. No change of note in the slopes lately. In cutting into the west side to prove the lode in the 74, driving east of old shaft cross-cut, we have made a good discovery, and which may lead to a good run of ore ground; as far as cut into the lode is worth 50¢ per fathom, there being solid ore still before us; this is the most eagerly point yet seen on Tankerville great lode. We sell 100 tons lead ore to-morrow.

TREGAROCK.—J. and T. Spargo, April 2: A slight improvement has taken place in deep adit, driving on No. 1 ore towards the junction of No. 3. Since our last it is also becoming more wet, which is a good indication. The lode is without material change since our last; we are looking forward to a speedy improvement, as present indications warrant such.

TRELIGH WOOD.—E. Hosking, J. Harris, April 3: The lode in the 44, west of engine shaft, is worth 12¢ per fathom. The lode in the 44 east is nothing to value. In the 34, east of Windmill shaft, the men are making fair progress with the driving. The lode in the 24, east of Windmill shaft, is without change. The lode in the 24, south-east of the large winze in the mine, is worth 15¢ per fathom respectively. The various stops in the mine are worth 20¢, 15¢, 15¢, 8¢, and 8¢ per fathom respectively.

VAN CONSOLS.—James Roach, April 3: There is no alteration in the 60, east of Gundry's, since last reported on. We are driving on the side of the lode for dispatch, and which we shall again cut into as soon as No. 2 winze under the 45 shall be effected with the 60. The winze under the 45 is some 11 fms. deep, and about 14 fms. in advance of the 60. The same remarks applied to this in my last holds good this week. I hope shortly to be in a position to make further progress, and to sink the lode at both ends. The 45 east ending on the north wall of the lode has improved a little, and from appearances I think it will soon yield large quantities of ore again. The winze sinking under the 45 is still in a lode worth about 200¢ per fathom. We have fixed a stull here in readiness for stoping roof of level as soon as dressing is actually commenced. The 35, west of cross-cut, is worth today 2½ tons of lead per fathom; east of cross-cut 1 ton per fathom. The 25, east of Little's, is fast improving in appearance; the lode contains more limesparg, and strata highly congenial for lead. The 75, east of west engine shaft, but, produced little or no lead, and from appearances I think it will soon yield large quantities of ore again. The winze sinking under the 45 is still in a lode worth about 200¢ per fathom. We have fixed a stull here in readiness for stoping roof of level as soon as dressing is actually commenced. The 35, west of cross-cut, is worth today 2½ tons of lead per fathom; east of cross-cut 1 ton per fathom. The 25, east of Little's, is fast improving in appearance; the lode contains more limesparg, and strata highly congenial for lead. The 75, east of west engine shaft, but, produced little or no lead, and from appearances I think it will soon yield large quantities of ore again. The winze sinking under the 45 is still in a lode worth about 200¢ per fathom. 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a dip of a split in the main lode, we put the men to cross-cut west in search of any part of the Wood lode which might have gone off as indicated above, and I am now able to report the cutting into a pedestal for several feet in width, and which is composed of lime-spar, lead, blende, and copper ore, of a very rich character indeed. There is yet no sign of the hanging wall being near, and we are in hopes that the main part or body of the Wood lode is still beyond the present end of the cross-cut. This latter point is now 6 ft. west of the part of the lode we have been driving on for the last 10 to 12 fms. In the 48 north, west on caunter, we have intersected the Cornish lode, which is 2½ ft. wide, composed of carbonate of lime and strings of quartz, with a little arsenic, but nothing valuable. The lode has a good deal of water. This end is now 11 to 12 fms. short of being under the level of the shaft. We hope to have machine kibbling working through south boundary shaft to the 20 fathom level early next week.

WEST WHEEL LUCY.—W. Harris, April 2: The stratum in the engine-shaft is much the same as last reported, and the men are making fair progress in sinking it. The stope on the Carbona is looking full as well as for some time past. The end driving east from the bottom of the adit, on the Carbona, yields a little tin ore, but is too small to work.

WEST WHEEL TOLGUS.—April 2: The water is in fork in Taylor's shaft, and the men are at work in the bottom of the shaft, but the water is very quick. The stopes in the back of the 115 are looking very well. The lode in the 195 end west is larger than it has been, it is now 4 feet wide, with stones of ore, and letting out plenty of water. The lode in the 95 end west is also looking more kindly, with spots of ore. The lode in the 85 end west is also large, yielding good stones of ore. The lode in the 75 end west is split into branches, and poor, it seems to be a horse of stone; it is a string of water flowing from the northern side, which gives us a little hope that the main part of the lode may be still rising up there. We shall soon see. Richards's shaftmen are not making as much progress in cutting down the shaft in the 40 as we could wish; they are down upon the back of the elvan, which is very hard and wet. The shaft below the 30 is stooped through to the back of the 40, a good lode all the way through; we think a part of the lode is gone back to the north of the level in going west; we have put the rise men to cut in north from the side of the level to prove it. The lode in the rise in the back of the 55, east of the 40, is a string of water, but nothing valuable. The lode in the winze below the 40, and over the rise, is 4 feet wide, yielding from 4 to 5 tons per fath. It is poor fatum; the rise may not be on the right part of the lode, being broken up by the elvan.

WHEAL ARGUS.—T. Trahair, April 3: The men in Hitchins's engine-shaft have reached the back of the adit level; as soon as we complete the shaft to this level we shall begin to divide and case it, and also to put in the necessary pitwork forking the mine. The men in the adit level on Ellsha's lode have cleared and timbered since we began to work 85 fms. The engine-house is finished, and in two or three days we shall begin putting in the engine. There is no change to notice in the mine except the falling off of the water at the stamps.

WHEAL BASSET AND GRYLLS.—W. Oats, P. Prisk, March 26: When Cock: The shaftmen are making fair progress in sinking the engine-shaft below the 35; the lode is secure, consequently we have commenced driving new one on the level of the 35 east is 3 feet wide, worth 12 cwt. per fathom. The lode in the 144, per fathom, and looks very promising. The 25 west is much the same as last reported. The 25 east is 3 feet wide, worth 18 cwt. per fathom. In the 15 west we have commenced taking down the lode, which is 2 feet wide, of a very promising appearance, and producing good stones of tin. In the 15 east the lode is 3 feet wide, worth 15 cwt. per fathom. The men are making good progress in clearing and securing the new or eastern shaft. In the adit level we have found one very troublesome to clear and secure, but more favorable results will be obtained if the side, which will be cheaper and less expensive in time to come. No change to notice in the tribute department. We sold on Saturday last 14 tons 7 cwts. 3 qrs. 27 lbs. of tin ore, realising 1196t. 6s.

WHEAL BONNY (Tin).—R. Hancock: All the works proceeding well. We propose selling this month's tin about April 10. No clay has been sold during the week. I have offered for all we can raise as fast as it is dry; this will save expenses of putting into sheds, storing houses, &c.

WHEAL CREBER.—H. Goldsmith, April 2: In the 120 east the men are taking down the lode, which we hoped to complete by the middle of next week. The lode is from 7 to 8 ft. wide, composed of camel quartz, and muddle, with copper ore, worth from 55t. to 60t. per fathom. In the 108 east the men are taking down lode, the width of which we cannot give at present, as we have not yet reached the south wall; so far as cut into—from 2 to 3 ft.—it is composed of a good-looking quartz, peach, muddle, and copper ore, producing of the latter 5 tons per fathom, with a good appearance. In the 96 cross-cut south the stratum is strongly charged with mineral, with an increased water. Above the 72 east the lode as the driving proceeds shows signs of more favorable conditions. The 72 west is 4 ft. wide, and we look forward to a change for the better. In the 48 east the lode is from 3 to 4 ft. wide, of a promising description, producing full 2½ tons of copper ore per fathom. In the rise in back of the 48 the men are taking down the lode, which is ¾ ft. wide; a good course of ore, producing full 16 tons of good copper ore per fathom for length, 3 fms. No other change.

WHEAL FRIENDSHIP.—March 31: We have no change to notice in our tvr work, regarding sinkings and setting reports.

M. HILL GREVILLE.—E. Hosking, W. Bennetts, March 29: Setting Report: As before advised the new shaft is set to sink to the 150 by nine men, at 27t. 10s. per fathom, lode producing saving work. The 140 to drive east of cross-cut by four men, at 18c. per fathom; lode worth 45t. per fathom. The 120 to drive east of new shaft by two men, at 8t. per fathom; lode 2 ft. wide, producing stamping work. The 120 to drive west of north shaft by two men, at 6t. per fathom; lode 20 in. wide, worth 7t. per fathom. The 120 to drive east of north shaft by four men, at 11t. per fathom; lode 2 ft. wide, worth 15t. per fathom. The 100 to drive east of north shaft by five men, at 15t. per fathom; lode 2 ft. wide, worth 40t. per fathom. The winze to sink below the 110 east by four men, at 11t. per fathom; lode worth 12t. per fathom. The stopes above the 110 east by four men each at 2t., and 2t. 10s. per fathom; lode worth 15t. per fathom. The 100 fm. level to drive east of north shaft, by two men, at 9t. per fathom; lode 2 ft. wide, producing a little tin. The stope above the 100 east, by three men, at 2t. per fathom; lode worth 20t. per fm. The 90 to drive east of north shaft, by two men, at 10t. per fathom; the lode is 2 ft. wide, worth 10t. per fathom. The 80 to drive east of north shaft, by two men, at 7t. per fathom; lode 18 in. wide, worth 8t. per fathom. The 60 to drive east of north shaft, by two men at 3t. per fathom; the lode is 2 ft. wide, worth 10t. per fathom.

WHEAL KITTY (St. Agnes).—S. Davey, J. Williams, March 29: New Shaft, Pryor's Lode: In this shaft, sinking below the 130 fm. level, the lode is worth for tin 17t. per fm. In the 130 fm. level, driving west of shaft, the lode is 2 ft. wide, and worth for tin 14t. per fathom. In the 130 fathom level, driving east of shaft, the lode is worth for tin 12t. per fathom. In the 115 fm. level, driving west of shaft, the lode is disintegrating and appears as a gossan running parallel to the surface. In the 115 fm. level, driving east of shaft, the lode is worth for tin 9t. per fathom. In the 106 fm. level, driving west of shaft, no lode has been taken up during the week, the same remark will also apply to the winze sinking below the 106 fm. level, east of shaft. In the 94 fm. level, driving west of shaft, the lode is worth for tin 8t. per fathom. In the 82 fm. level, driving west of shaft, the lode is worth for tin 7t. per fathom. In the 20 fm. level, driving west of rise, the lode is worth for tin 8t. per fm. The lode in the 90 fm. level, driving east of engine-shaft, is producing saving work for the stamps. The lode in the north adit level, driving west of shaft, underlying west adit, is not in sufficient quantity to value.

WHEAL LUCY.—W. Harris, April 2: The lode in the end, on the copper lode, is full 3 ft. wide, spotted with copper ore, but not enough to value. There is no other change.

WHEAL MARY.—Thos. Parkyn, April 3: South Lode: We have it still in the engine-shaft, and I am pleased to say the lode is very good; it is now passing out of the shaft. No change to note in the other lodes. The cross-cut tunnel, driving to intersect the great north lode, is again harder, but we are making good progress, and shall be into the lode by the time the stamps and the carpenters and labourers are making capital progress in laying out the tin-dressing floors, which I think you will be pleased to see when you come down. All things are in a forward state.

WHEAL RUBY.—J. Richards, April 2: There is no material change to notice since my last report, and in consequence of the lode continuing very hard for driving in, I have put the men to drive the level by the side of it, where I expect to get through the ground at a greater rate, so as to reach the cross-course in the least time possible, about which I expect a great change in the lode, and such as I hope will improve its quality.

WHEAL REGOSS.—Thos. Parkyn, April 3: The engine is working well, and next week we shall commence to change the work in the shaft, and when it is done we shall at once commence to sink the engine-shaft below the 22. The iron lode has been cut through in the south part of the sett by the railway people making the railway, and is found to be 18 ft. wide; and some large and rich rocks of iron have been taken out of the lode, and by driving a short cross cut from the engine shaft east we shall intersect this lode 20 fms. below the surface, when no doubt a large quantity of good iron ore can be mined. The iron lode is taking its course northwards, underlying west about 20 in. to 6 ft.

LILLOUGHBY.—H. Nottingham, March 27: We are making better progress again in the sinking of Pyne's engine-shaft; the surface water has dried up, and we have cut into a fresh bed of ground in the bottom, which is better for blasting. The 13 fm. level end, north-east of Pyne's shaft, on new lode, is unproductive, and of shaley character. The 13 fm. level end north, on Goddard's lode, is without change this level is now being driven on the course of the joint I mentioned having intersected in this end in a former report, which I believe now to be a separate and distinct east-west lode, and the 13, north of shaft, on new lode, is of the same value as last reported. The 13, going south on Goddard's lode, is poor at present but from present indications I think we shall soon have a productive end again. The stope in the back of this level, 10 fathoms south of cross-cut, has improved for lead, the north end is worth 1 ton of lead and 15 cwts. of blende per fathom; the south end is worth 15 cwts. of each per fathom. The end north of trial shaft, on No. 2 east and west lode, is poor, and also the backs, so I have now put the men to resume the sinking of the shaft; the water which was so troublesome when we were sinking before, and which had nearly ruined the shaft, should be able to do so again, but much trouble now. Surface operations are going on without interruption. We have 24 tons of blende and 9 tons of lead into the pile. The cart is constantly employed now carrying it down to the house at station as we dress it. Everything is being pushed on with the utmost speed.

WHITEHAVEN IRON MINES.—T. Rosewarne, April 3: No. 3 cutting on top of hill: This drift has been driven about 2 fms. 3 ft. on a side vein; this vein is not looking so good, being split with a horse of granite. Midway drift, driving west of rise, has been driven 5 fms.; this lode is 4 ft. wide, and produces 3 tons of ore to the 4 ft. Stopes in back of No. 1 drift have been worked about 2 fms.; the lode here will produce 25 tons of ore to the fm. No. 2 drift has been driven about 1 fathom 4 ft.; the lode here is much the same as stated in my last report.—No. 3 Drift: The rise in back of this drift has been risen about 4 fms.; the lode in the northern end of the rise is 4 ft. wide, composed of soft, decomposed manganese and small kidney pieces of iron ore, and will produce about 10 tons of ore to the fm.; this position is used on with all energy, as it is very important to take care of Nos. 2 and 3 drifts. The quantity of ore carted away this last fortnight, 254 tons.

TREVARRACK.—The enquiry for shares in this mine continues, and the upward movement will, it is expected, be considerable when the water is out of the shaft and sinking resumed. It must be remembered that any improvement of importance would soon make these shares 10t. each, and that the price would not be considerable.

The Rio Tinto Company has been registered with a capital of \$1,000,000., in 20,000 shares of 10¢ each and 500 shares of 1¢ for the acquisition of the Rio Tinto Mines and the construction of a railway from the port of Huelva to the mines.

Holcombe Valley, \$ to 1/2 prem.; it will be seen by the superintendent's letter, in another column, that work is progressing satisfactorily. The main straight shaft, from which it is intended eventually to work to the three main veins, is down 33 ft., and the middle incline on the Mammoth vein was cleaned out and timbered to a depth of 70 ft., thus leaving about 40 ft. to clean out and timber before reaching the bottom of the old workings; from this point sinking will be commenced. On the sides of the incline, free gold was dug away the quartz to make room for the timber, free gold was also interspersed throughout the ledge. In the bottom of this incline, where work was left off by the former owners, the ledge is only 4 ft. wide free gold making its appearance more or less toward

THE AZOFF COAL COMPANY, with a Capital of 150,000⁰⁰, in 15,000 shares of 10⁰⁰ each, has been formed for developing, under improved management, the valuable Nicolajevski Collieries, and also for acquiring and working twelve other mining areas, through which a railway passes, bringing them in direct communication with Moscow and other important places, besides the principal ports of the Sea of Azoff and the Black Sea. The mining rights cover an area of some 1067 acres, containing in the steady process a workable quantity of about 600,000 tons of coal. Its quality it is described as most superior, and is known as the favourite coal in Russia, both for domestic and steam purposes.

FINE WANTED,—12-horse **SECOND-HAND**, with **WINDING**
GEAR. Portable preferred.
Address, Mr. **WHEATLEY**, 31, High-street, Sheffield.

OF 1873

GRIFFITHS'S GUIDE TO THE IRON TRADE IN GREAT BRITAIN.—MR. GRIFFITHS begs to remind Ironmasters in all parts of England that the publication of THE GUIDE TO THE IRON TRADE is deplorable and that the consequences of the neglect (no doubt through oversight) of some of the Ironmasters to fill up the forms, and forward the returns to 133, Cannon-street; and as the GUIDE must be published immediately, the Editor respectfully begs prompt attention to the returns, in order that the statistics of the book may be complete.

Notices to Correspondents.

* * * Much inconvenience having arisen in consequence of several of the Numbers during the past year being out of print, we recommend that the Journal should be filed on receipt: it then forms an accumulating useful work of reference.

IMPROVED ORE HEARTH.—I noticed in the Journal of March 22 a letter signed C. Dodsworth, on the subject of Improved Ore Hearths, and was a little amused at his remarks thereon, for it was only on Feb. 26 that the same gentleman wrote me as follows: "I suppose you have tried 'Johnson's Ore Hearth' of Allen Mill. Would you oblige me by saying what you think of it, whether it is really so much superior to any other kind or not. If you have the ore hearth at work would you kindly allow me to look at it at work, and if you would give me a description of its construction I would feel greatly obliged." I declined giving him the information he asked, but as a practical smelter I do not hesitate to say, without fear of contradiction, that Mr. Johnson's improved hearth far exceeds any plan of smelting I ever witnessed. I have no desire to enter into any further controversy on the subject, but in duty to the public, and more especially to Mr. Johnson, I have felt bound to ask you to insert this in your next issue.—W.M. PALICE, *Derwent Mines Smelting Works, April 3.*

BOG IRON ORE.—Will "W. H." communicate with Messrs. Tudor and Co., Lead Works, Hull.

FRANK MILLS.—Until the satisfactory report of the meeting on March 14, I noticed these shares were very low in the market. There was a period in the history of this mine in which she suddenly found favour in the eyes of the public, after having been almost overlooked, as at present. It was observed she was paying a very high percentage on the then price of the shares, and large transactions at once took place. Now that she is likely to become a great iron mine, and to return to a rich lead mine, what ought to be her quotation, with just 1845, pulled in as a cash balance (from the call now made)? As least now stands at a very high price, and is advancing, ought we not to expect a good quotation in the price of Frank Mills? An early resumption of dividends is anticipated from the iron ore alone (reported to be underground in untold quantities). If the lead ore comes in under the iron, the shares of the mine will spring up very rapidly. If quoted at 10s. per share, it is only 50,000l. for the concern. This mine is splendidly managed, and in Christow is now attracting the attention of Cornish residents. I should be glad to hear from any shareholder as to the prospects of this eligible property. Many lead mines are valued at the sum above-named without very much greater pretensions than Frank Mills, with her splendid chances of redeeming her character in the eyes of her old admirers.—ONE INTERESTED: *Truro, April 3.*

The letter from Capt. Ellenor has been handed to the party named.

MINING IN UTAH.—The letter from Mr. A. Daniel (Diamond, East Tintic) has been received. The information contained will prove of value when an opportunity for its use occurs.

THE SILVER LIGHT.—"S. Y. and Co." (Wolverhampton).—The address of the company formed for working the patents of Mr. A. M. Silber, under which this light is produced, is 2, London Wall, E.C.

DRESSING MACHINERY.—"R. F." (Edinburgh).—There is no work with which we are acquainted devoted specially to the description of dressing machinery, but much information is given in "Phillips' Metallurgy," published some years since by Messrs. Griffin. With regard to modern inventions, all necessary information can be obtained from the series of articles we have long been publishing in the *Mining Journal*, from Mr. John Darlington, of Coleman-street buildings, Moorgate-street. He has had long practical experience, and has given the working drawings of the best forms of machines.

AMERICAN SUBSCRIBERS.—In reply to several enquiries, it may be stated that subscribers in the United States can be supplied with the *Mining Journal*, post free, at the price of \$8 gold per annum, payable in advance, by remitting to Mr. D. Van Nostrand, publisher, and importer of scientific books, &c., Murray-street, New York; or, direct to our Office, 26, Fleet-street, E.C.

Received—"F. G. L."—"A Shareholder in Richmond."—"M. A."—"A. N."—"An Observer."—"F. E."—"Anticipated."—"H. F."—"P. M."—"R. W."—"Such advice was never given by us."—"C. R. S."—"W. P." (next week).

THE MINING JOURNAL,

Railway and Commercial Gazette.

LONDON APRIL 5, 1872.

THE SELECT COMMITTEE ON COAL.

The evidence taken by Mr. MCNDELLA'S Committee, which has now sat for several days, has so far added very little indeed to the information we were in possession of before its appointment as to the cause of the high price and scarcity of coal which led to its being moved for. Some of the witnesses, in fact, merely recapitulated statements as to the production of coal in the United Kingdom for several years past, as given by Mr. HUNT in his Annual Statistics, adding to them the average tonnage per individual, such as has been given from time to time in the *Mining Journal*. In addition, however, we have had estimates given as to the probable consumption of coal in the making of pig and manufactured iron, but these are such as must not be looked upon with too great reliance, for Mr. MRADDE, the Assistant-Keeper of Mining Records, in his evidence, gives 3 tons of coal as being required to manufacture 1 ton of pig-iron. On the other hand, we find practical men, like Mr. G. G. SANDERSON, for many years manager of the Parkgate Ironworks, and Mr. W. SPENCER, for a long time mining engineer to Messrs. BOLCKOW and VAUGHAN, in reporting on the Lincolnshire ironstone, which scarcely averages 25 per cent. of iron, and giving 1 ton of coke and 15 cwts. of coal—equal together to 2 tons of coal—as the fuel required for making 1 ton of pig-iron. Again, with regard to the consumption of coal for railway purposes, Mr. G. S. ELLIS, the Deputy-Chairman of the Midland Railway Company, writes:—

"It has been stated on authority before the Select Committee now sitting that the consumption of coal for railway purposes in the United Kingdom amounts to 2,000,000 tons annually. I venture to suggest that this quantity is much understated, for the following reason:—The traffic receipts of the railways of the United Kingdom for the week ending March 23 were 941,885l., the Midland Company's receipts being 93,517l., or nearly one-tenth of the whole. Now, the coal used by the Midland Company in 1872 amounted to 496,574 tons, or (say) 500,000 tons, and, supposing the consumption of coal by the other railways to be in the same proportion to their traffic receipts, the total consumption would amount to 5,000,000 tons. But allowing for a greater average consumption on the Midland in consequence of the large proportion of heavy traffic carried on that line, it seems to follow that the coal used by the railways of the United Kingdom is more than double the quantity stated before the committee."

It is, therefore, evident that too much faith must not be placed in the figures given by non-practical men.

Still, an important item has been brought out distinctly, although it is by no means new, for it coincides with the views we expressed at the close of the last year. We allude to the production of coal, which many persons considered would be less in 1872 than it was for the previous year, but, as we alleged, would be considerably more. Such was the case, for the increase has been estimated at 3,000,000 tons. Thus has been dispelled the oft-repeated assertion that the very high prices paid to the miners during the greater part of last year led to a marked decrease in the output of coal. This, we believe, will be more clearly shown to have been the case in those districts where the working hours were limited to eight per day, as Mr. NORMANSELL, one of the secretaries of the South Yorkshire Miners' Association, has been engaged in tabulating the quantities raised by every miner in the extensive district he is connected with. This he is enabled to do with comparative ease, seeing that every tub of coal is weighed on reaching the pit bank, and the quantity inserted in a book specially prepared for the purpose, and kept by a check-weighman paid by the miners.

With all those facts in the possession of the Committee, we are at a loss to see what can be done, or what object can possibly be gained were the members to sit throughout the whole of the year. They will arrive at last at what is really a foregone conclusion as to the cause of the existing high price and comparative scarcity of fuel. We all know that the increased production of pig-iron, and the converting of the greater part of it into various manufactured forms and into steel, led to a very large consumption of fuel. This will be more apparent when we state that, whilst in 1871 there was exported 1,057,000 tons of pig, in 1872 the exports had fallen to 332,000 tons. Supplies of coal, consequently, fell short of the requirements of consumers engaged in the production of iron and steel; and, as the natural result of the demand exceeding the power of supply, prices advanced rapidly, being to some extent accelerated by a panic, especially in London. With regard to the prices charged in the metropolis, we may say that the extraordinary rise last year and in February was to some extent traceable to a simple matter, which, no doubt, colliery owners and coal merchants never thought of.

As a rule, we may say the collieries are not aware of the prices their employers obtain for their coal, but that knowledge of such a very important matter was very freely and fully given by the daily papers in the metropolis. There the men found quotations of the prices of seaboard and inland coal, and were, consequently, enabled

to calculate pretty nearly what the profit on a ton would be. Thus armed they were enabled when any marked advance took place to demand an increase of wages. In this way, then, there can be very little doubt but what the cost of coal was increased to the public not only in the metropolis but throughout the country.

What then, we may ask, will be the result of the evidence taken by the committee? Will it be the means of giving the public cheaper coal than it has at the present time? We must certainly say we cannot see how it can have that effect. It has been urged that our exports of coal, which are now nearly equal to one-ninth of the entire produce of the kingdom, might to a considerable extent be curtailed by imposing a duty on what was sent to countries where existing treaties would allow of our doing so. But such a retrograde policy would be tolerated but by a very few persons inside Parliament, and is, therefore, out of the question. Then, again, there is no power in the Government or in Parliament to force increased production, or to compel men to work more hours per day than they have agreed to, and there is no mistaking the fact that the mining body is a power at the present time, whatever it might have been a few years since.

It will be evident, then, that the Committee will leave the coal trade (so far as production and price is concerned) in the same state it found it. All that will have been obtained will be a mass of figures, which the general public, looking only to a large reduction in the price of coal, will care very little about. One thing, however, may console many in their disappointment—and that is that the high prices realised for coal during the past nine months are now working out a certain and effectual cure, for, owing to the admittedly profitable character of mining, new collieries are being opened out in all parts of the kingdom with unprecedented rapidity, and when in working operation they must inevitably lead to a very large reduction in the cost of coal. It will then be the reverse of surprising to many keen observers, who have been watching the signs of the times, if there is not a panic the opposite of that to which we have alluded as regards coal, but a thousand times more intense, and one that will leave a scar behind it that may take years to heal. We have only to look at the history of past commercial crises, and the apparently great prosperity by which they were preceded, to see that such a visitation is by no means unlikely to occur. Whether such is or is not the case, one thing appears certain—and that is that the present prices of coal, especially for household purposes, cannot be maintained in the face of approaching summer, with its decreased consumption; so that, in our opinion, the change of season will do more to bring down prices of fuel than anything that can be effected either by the Committee, with Mr. AYRTON at its head, or by Parliament itself.

THE MINES REGULATION ACT.

It appears that not only is there great dissatisfaction amongst the mining body as to the appointment of Managers by the Home Secretary, but also with regard to the Special Rules drawn up at the instance of the Government Inspectors. With regard to the appointment—or, rather, non-appointment—of managers, some very extreme measures are spoken of as likely to be resorted to in the event of old and practical managers not being allowed to continue in the positions they have long held to the satisfaction of both masters and men. Several cases of great hardship have been brought under our notice, and for which there appears to be no reasonable ground. Why should such be the case? One man has been a manager for upwards of 26 years, two-thirds of which was in connection with a fiery colliery in South Yorkshire, and he kept it free of fatal accidents, yet he has been refused a certificate, although his abilities are highly thought of by mining engineers of eminence. Another man, who for years past has had upwards of 1000 men under him, has also been refused a certificate. It would thus appear that the certificates are left to the caprice or judgment of Government Inspectors, who are not in a position to judge of a man's abilities, seeing that they are unable to visit all the pits in their respective districts even once a year. Some of the Inspectors, like Mr. Southern, have placed no obstacles in the way of granting certificates of service to underground viewers, whilst others require mining engineers, or those possessed of book learning, in preference to practical knowledge. The miners, however, have taken the matter up rather warmly, and for their own safety declaim loudly against that species of supervision which allows one man to be the manager of a number of collieries. So strong, indeed, has been the feeling on the subject that a very few days since one of the leaders of the most influential body of miners in the kingdom asserted that if scientific certificates were refused to the really practical men the pits would strike, and leave Mr. BRUCE to fill them up as best he could. We may also say further that during the present week Mr. NORMANSELL has been in London visiting several Members of Parliament, and paying the way for a large deputation from the National Miners' Association to meet Mr. BRUCE on the subject of managers' certificates. The Home Secretary, therefore, is likely to have rather a busy time of it.

On the question of the Special Rules, as arranged by the Government Inspectors, there is also considerable difference of opinion as to their being such as can be practically carried out. The Inspectors have been obliged to alter many, and also to meet both masters and men on the subject. On Thursday Mr. T. EVANS, the Government Inspector of Mines for Derbyshire and the adjoining counties, had to meet a deputation from the colliery proprietors with regard to the rules. On Saturday last he also received a requisition addressed to him from "the miners and pitmen employed at the Clay Cross, Lupton, Foxley Oaks, Dunston, Devonshire Silkstone, Hunsdale, Unstone, Tipton, Tibshelf, Pilsley, Birley, and many other collieries in the Derbyshire district, who beg most respectfully to submit several objections to the special rules." Mr. EVANS, we understand, will meet a deputation from the Miners' Association next week. There is, consequently, every appearance that we shall have some of the clauses in the Mines Regulation Act again discussed in Parliament during the present session, for many of the provisions admit of such a diverse interpretation that they must be more clearly defined so as to be more easily understood. The power of the Home Secretary and of the Government Inspectors will also have to be reviewed, and the leaders of the National Miners' Association, who have considerable parliamentary influence, are sanguine that they will be able to effect such alterations as will meet the views not only of the colliery proprietors but of the miners as well.

THE CERTIFICATE QUESTION, AND THE HOME OFFICE.

A few weeks ago we drew attention to certain correspondence which had taken place between Mr. J. W. HALL, solicitor, of Bilston (the author of "Hall's Coal Mines Regulation Act," and of "The Metalliferous Mines Regulation Act"), and the Home Office relative to the refusal of a certificate to a gentleman who seemed to be in every way qualified for one. We learn that since that time Mr. HALL has received from the Home Office an intimation that the reason for refusal was that the Inspector for the district had reported the gentleman as not a manager but only a "deputy manager." To this Mr. HALL submitted that the Act did not recognise the capacity in which, for the time being, the person desiring a "Certificate of Service" might be engaged as a reason for refusing it; but that his client was entitled, under that section, for past services, as distinguished from present status or occupation; and he pointed out that there was nothing in the Act to prevent an actual certificate holder from becoming the very next day what the Secretary of State's letter called a "deputy manager."

Under these circumstances Mr. HALL again requested that, if the Home Office considered that any link in the chain of his client's services was stated or vouched less perfectly than it should be in order to reasonably satisfy the Secretary of the facts, the deficiency might be pointed out, with a view to its being vouched in such a manner as might be desired. To this the Home Office responded that further enquiry had been made, and that the former decision must be adhered to. Nothing daunted, however, Mr. HALL prepared to return to the charge. He framed a further appeal to the Home Office, containing a résumé of the facts, and requested that if, as to those facts, the

Home Office had received any information at variance with what we have stated, it should be communicated to him. The Home Office, however, has been elaborated for raising 10,000,000l. of ordinary stock, nominal by an issue of stock to that amount at 80 per cent. discount. The conditions are certainly very hard, but they will furnish the company with additional capital to the amount of 2,000,000l. This 2,000,000l. will enable the directors to complete the operations of the same might be communicated to him, so that, in accordance with ordinary practice, he might have an opportunity of giving an explanation. Having regard to the recent interview the Home Secretary gave to the deputation of colliery proprietors, to reconsider some of the events, satisfactorily exercised, Mr. HALL scarcely doubts that a final appeal would have been successful.

But the *résumé* was not forwarded. The gentlemen concerned thought it not worth while to press the matter. From the manner in which the certificates of service had been distributed Mr. HALL's client had arrived at the conclusion that such a certificate would be of but little value. This he thought was conclusive from the fact that although he had been himself refused such a certificate, yet the colliery with which he was connected as a director a month or two ago, and also a ganger or timekeeper on the surface, had each a certificate! The more the state of things surrounding the distribution and the refusal of managers' certificates is investigated, the more the position taken up by the colliery proprietors when they met Mr. BRUCE appears strengthened, and the more judicious appear the promise of the Home Secretary as to the re-consideration of certain cases of refusal.

COAL BETWEEN THE STAFFORDSHIRE AND THE SHROPSHIRE FIELDS.

It will be in the recollection of our readers that some time ago considerable attention was directed to a tract of land belonging to Lord HATHERTON, known as the Huntington estate, situated near to his lordship's residence, at Teddesley Park, not far from Stafford. It was believed that throughout more or less of that land there was a proved area of 1000 statute acres valuable coal measures were to be found, and that such discoveries beneath the sandstones would be observable between the South Staffordshire and the Shropshire coal districts would prove a great encouragement to the continuing of investigations throughout other promising portions of the ground thereabouts. A company was projected, if not indeed formed, but the negotiations ultimately fell through.

Recently trial borings have been begun, and they are still in progress, with every prospect of the treasure sought for being discovered. The borings have extended to about 80 yards. After lightening, light rock of a clayey nature, light rock like purple limestone, light feldspar, and light rock and rock binds had been the strata passed through, ironstone 3 in. thick was come upon at 50 yards. Similar strata, with white pebbly rock (very hard but not so much the same rock with grey sandstone partings, the same as the red pebbles, and subsequently red and brown rock, light brown red rock, and gravel were found. All the deposits have been fully tabulated, and down to 76 yards they number 29. The boring is being made near to Huntington village, a little westward of the turnpike road leading from Cannock to Stafford. Between 600 yards to the S.S.W. the real pebble beds of the Bunter Sandstone formation have been worked in a little hill for many years, and there can be little doubt that the boring is being made in the pebble beds.

Splendid sinkings are also being made in similar strata to the depth of 101 yards in the Fair Oak Colliery, not far distant in the north-east direction; and from the shaly state of the strata upon there able mining engineers believe that the coal formation being entered. At a colliery at Breton the Lower Bunter Permian formation are absent, though they had to be passed through in some sinkings in a more southerly direction. That fact, however, the promising character of the Huntington and the Fair Oak sinkings. But more than that, at the West Cannock Colliery, which joins Huntington, a pair of pits have been sunk to a depth of 101 yards all in regular coal measures, with the exception of 10 yards of pebble drifts above the first coal. The West Cannock has 22 seams of coal and the regular ironstones, and they have worked some coals up to within 50 yards of the Huntington boundary. Under these circumstances there seems to be no reason why regular sinkings should not at once be made on the Huntington estate, and preparations made on the surface for connecting the colliery with the railway (south and north-west) and the canal, both of which are near at hand. There seems every reason to believe that the present known Staffordshire coal field will be considerably extended in the direction pointed out. If this should be so, the result will prove of the utmost importance to Staffordshire, where more fuel and ironstone are so sadly needed.

COSTA RICA COMPANY.—The reception accorded to the Costa Rica Gold Mining Company by our daily contemporaries cannot fail to gratify all who wish to promote honest English mining enterprise in every part of the world. The sagacious City Editor of the *Times*, who has done legitimate mining such a service by warning investors against embarking their capital in so many American schemes, has written in most satisfactory terms of the Costa Rica Company, thus distinguishing it from the ventures which enrich one but impoverish others. Other financial authorities have been quite as quick to perceive the legitimate and promising nature of this important company. We understand that the investing public is impressed by the soundness and remunerative nature of the undertaking, for the exceptional character of the board is in itself a guarantee. Applications for shares from the higher class of investors have been very numerous, not only within the radius of the Stock Exchange but in the chief cities of Ireland, and in the shrewd and monetary circles of Scotland. It seems hardly doubtful that the Costa Rica shares will soon advance to a high premium, and that the company will attain a preliminary success which may be correctly taken as a good augury for a still more brilliant result when the time for declaring dividends arrives.

COAL AND IRON IN THE UNITED STATES.—In the course of the year, the Eastern Railroad Company of Massachusetts laid 330 miles of iron rails and 1170 tons of steel rails; on 56 miles of the main line, between Boston and Portsmouth, 17½ miles are now laid of steel rails. The quantity of coal carried over the Philadelphia and Reading Railroad last year was 6,185,434 tons, as compared with 6,002,573 tons in 1871, and 4,633,504 tons in 1870. In 1870 the movement over the system (which was then a much smaller one) did not exceed 1,946,195 tons; and in 1850 it was only 1,340,000 tons. The revenue derived by the railroad company from the carriage of coal was \$2,071,731 in 1850, \$2,328,158 in 1860, \$6,468,187 in 1870, and \$7,513,115 in 1872. The company owned last year 14,500 coal cars. The coal trade of the upper division of the Northern Central Railroad increased largely last year; the coal traffic of the main line presented, however, but a small increase last year, owing to an absence or adequate traffic facilities at Baltimore. Some 100 tons of new rails, equivalent to 40 miles of new track, were laid last year upon the Marietta and Cincinnati Railroad. New iron railways are in contemplation in both Eastern and Western Virginia.

ECONOMY IN FUEL.—Sir W. Fairbairn, C.E., in presiding at the Manchester Steam Users' Association annual meeting, observed that for the last 18 years he had been advocating the system of working steam expansively, and of constructing boilers on principle that would enable them to work with steam at a pressure of 180 lbs. to 200 lbs., and even 300 lbs. to the square inch. He was convinced that a steam at that pressure double the work might be done with the same quantity of fuel that was now done at the pressure of 40 lbs. or 50 lbs. per square inch. The boilers of the improved construction were in actual working, with great security and efficiency. Considering the outrageous price of coal, the manufacturers would look forward to a change of pressure from 40 lbs. to 180 lbs. as a most important savings might result. It was not for the exclusive purpose of the present case of dear fuel that he ventured upon this argument. He had obtained the same view for years, and it was based upon actual experience, and the fundamental principles of dry steam and its subsequent expansion. The

kins solved the question of safety 40 years ago, but, like many other useful inventions, it had been laid aside to pacify the fears and prejudices of ignorance. Steam at 200 lbs. pressure was as easily generated and retained in closed steam at 10 lb. pressure, provided it was generated and retained in constructed vessels. He had six or eight boilers now at work with steam at 10 lb. pressure, with even greater safety than he attended those now in general use. It was a mistake, therefore, to suppose that high steam pressure was dangerous if retained under proper control.

REPORT FROM CORNWALL.

"Threatened men live long," or we should be inclined to think that the Stannaries Court could not long withstand the heavy hand levied at it. Nobody defends it, hardly even those who are interested in it; and as to its enemies, their name is legion. Teague is certainly doing all he can—not to create, for that is his duty—but to direct public opinion on the matter, and he emphasises the opportunity afforded by the Tincroft meeting, on Monday, the opportunity another very heavily-shotted gun at this most prodigious target. Two words sum up the headland front of the Court's predicament. They are words of weight—delay and expense. In dealing with these are words of gentlemen humourously also cited by Capt. Teague, as that gentleman humorously said, "the mine had gone into the way out yet." And then there is delay, and had not found its way out yet. And then there is expense, which went into the Court for a deficiency of 300*l*.; this has been increased by expenses to 360*l*., to pay which a call has been made which should produce 1380*l*. We quite agree with Capt. Teague that the Stannaries Court is now the greatest obstacle to the progress of mining in Cornwall. It is essentially, with all the reforms that have been made in it, a thing of the past, and it is time that it was got rid of the better. It is nothing more nor less than an anomaly that in days when bankruptcy proceedings had become so common, when the powers of the County Courts are being extended, that such a petty and obnoxious jurisdiction should exist. It is not quite up to the mark of the county motto, "One and All," and the opposition to the Court should not yet have got beyond the preliminary stage. What we want is organisation, and after organising the Court is abolished. There will never be that flow of capital into Cornwall to assist in legitimate enterprise that there ought to be.

The Court is about to be met in the midst of a plentiful crop of mine meetings, and for the most part are of really a satisfactory character, and amidst vicissitudes, something more than mere ephemeral. At several of the meetings the question of dues has been discussed, and there is evidently a feeling that one-twentieth will be about the maximum. Nor is this to be wondered at. The miner has all the risk; he is the only one who has suffered by a fall in labour, and by the rise in coal and materials. The miner is a sleeping partner, whose motto, hitherto, has been "Heads I win, tails you lose." Of course all owners of mineral rights are entitled to fair compensation, but we are inclined to agree with Capt. Lytle in this particular likewise, that the days of high dues are numbered. No county contains more liberal-minded landlords than Cornwall, and the dues question, except in some few quarters, is not a very important or particularly difficult.

to present any particular difficulty. The particularly satisfactory feature of several of the recent meetings was the evidence they afforded of the extension of improved machinery, especially in the dressing-floors. Thus, at Wheal Coatnall, where the patent ore-dressing machines have been erected, Murray's patent pneumatic stamps have been introduced at the mill. An extraordinary illustration of the defective character of operations at some of our mines has just been supplied by the Walls. Here is a mine which was knocked, taken possession of the Ducky only three months ago, and then purchased by Capt. Williams. He at once set to work in earnest, cleared the adit, which had been choked for 17 years, in a few days, and has now sold 10 tons of ore at the barrows and shallow levels. The pumping engine, which is undergoing repair, will be at work in a week or two, when a large number of men will be employed underground. Much praise is unquestionably due to Capt. Williams for his great energy in remodeling the mine, and for his determination to make a new and better footing. It is calculated that there are now in the mine 250 tons of the enormous heaps of leavings at surface (thousands of tons) will produce 25 lbs. of tin to the ton of stuff, which have been accumulated for 200 years, and from which 10 tons of tin have been already sold in some time since taking possession: 200 to 300 heads of stamps will soon be in

understand that the important office of Mine Inspector for all and Devon has been conferred upon Dr. C. Le Neve Foster, who is formerly connected with the Miners' Association, and whose attainments are well known.

Totnes, Buckfastleigh, and South Devon Railway half-yearly was held this week, and showed that a very substantial amount of traffic done. The tramway to Totnes quays, in connection with the line, will be completed. This will be an important point for the mines in the Ashburton.

A successful launch was effected from the well-known building of Messrs. Harvey and Co., Hayle, on Saturday—a very fine iron screw-driven launch, built for Mr. George Batters, and intended for trading on some of the rivers. The launch was a very good one, and the interesting ceremony of launching was performed by Miss Annie Husband, who, in the presence of many guests, named the vessel *Stern Rostro*. Her dimensions are—length between keels, 12½ ft.; beam, 27 ft. 2 in.; depth of hold, 11 ft. 6 in.; tonnage, 100 tons. The launch is fitted with a 20-horsepower engine, built by Messrs. Hayle, and is admirably suited for river traffic, drawing but 2 ft. for draft. She is to be supplied with a surface condensing engine of 45 horse-power, which will be put into her by the company forthwith.

2.—The Warrant Market showed some firmness last Wednesday and business was done up to 123s., but this improvement sustained, and on Thursday and Friday transactions took place from 121s. 6d. to 118s. 6d., the market closing for the week at this level. There has been little animation, the quotations on Friday being 118s. 9d. to 119s. 6d. Yesterday a moderate amount of business was done from 120s. to 118s. 3d., closing with buyers at 118s. 6d. The prices of makers' iron are still a little irregular, but a decided reduction has taken place on the rates ruling at present. This morning transactions opened at 120s., from a very speedy reaction took place to 115s. In the afternoon the market was again depressed, and the price further gave way till it reached 111s. 6d., but thereafter rallied, closing with buyers at 11s., sellers at 111s. 6d. Owing to religious services the market will be closed on Friday.

No. 1.		No. 2.	
121s. 12s. 6d.		119s. 12s.	
therrie ditto ditto	146 0	127 6	
ness ditto ditto	147 6	125 0	
merie ditto ditto	147 6	122 6	
thre ditto ditto	150 0	125 0	
gion, at Glasgow ditto	150 0	125 0	
at Port Dundas ditto	150 0	125 0	
arnack, at Ardrossan ditto	155 0	125 0	
inton ditto ditto	122 6	120 6	
mclingen ditto ditto	122 6	120 6	
on, at Glasgow, selected, ditto	150 0	—	
ills, at Leith ditto	145 0	125 0	
iron ditto ditto	135 0	130 0	
rods	£14 to	£15 0	

SHIPMENTS.		
.....	.....	Tons 11,167
.....	.....	21,729
Decrease .....	.....	10,562
.....	.....	43,496
..... of Middleborough pig-iron into Grangemouth :—		
.....	.....	Tons 1,240
.....	.....	750

Decrease	1.90
Net decrease for 1873	490
	1,219

mercantile reputation of the old Monkland Iron and Steel

Company is being most honourably sustained to-day by the payment in full of the claims of their creditors, with 5 per cent. interest. In 1861 this company was forced to suspend, and to-day these long-standing claims are being discharged in the noble way we have indicated. All honour to the company whose obligations were not forgotten till they were legitimately blotted out!

Inferior coal has been generally reduced about 2s. a ton from the 1st inst., and the best class is in buyers' favour, while manufacturing coal and crosso have also been reduced in price. This was to be expected from the general dullness of trade on account of the high price of fuel, and a further reduction cannot be very long delayed. The miners in the Wishaw district, lured, it is said, by the high price of coal, are negotiating a lease of a coal field in the district, to be worked on the co-operative principle. Of course, should a sudden subsidence of prices come, even if they were successful for a time, it would, like a sudden subsidence of roof, cruelly smother them. Anxious to get rich, however, they seem willing to risk it. During the week just ended the total shipments of coal from the Scotch ports, foreign and coastwise, amounted to 34,698 tons, against 33,171 tons in the same week of 1872, being a decrease of fully 1550 tons.

METALLURGY.—A descriptive lecture was given in the Kelvin Hall, Glasgow, by Mr. John Mayer, F.C.S., which was well attended. The lecturer commenced by pointing out the processes which are employed in the separation of metals from their ores. Iron was the principal metal considered. The nature of the ores of iron was spoken of, including the blackband and clayband of the coalesures, the hematite of Cumberland and Lanarkshire, bog-iron ore from Stornoway, pea iron ore from the North of Ireland, Marbella ironstone, and the rich spathose ironstone of Weardale, Devonshire, and Germany. The various kinds of furnaces employed, and the chemical changes which take place in the roasting, melting, and puddling processes were described. The lecturer then dealt with the various stages of development of the iron manufacture in the Cleveland district during the last 20 or 25 years, the total production within the limited area of Cleveland being now about 2,900,000 tons per annum, or one third of the total production of the United Kingdom. The usual height of the blast furnaces in Scotland was stated to be about 50 ft., but in Cleveland the furnaces frequently reach to a height of 75 to 95 ft., some being 193 ft. high, and the weekly production of pig iron varying from 400 to 500 tons per furnace. Special references were made to the mode of closing in the blast furnaces, and the lecturer pointed out the large gains that have recently made in Scotland in the same direction, especially at the Monkland Ironworks and the Summerlee Ironworks. The lecturer explained how the different kinds of pig-iron are suitable either for foundry purposes or for conversion into malleable iron, and he mentioned that Lanarkshire pig-iron, more especially that made at Gartsherrie and Coltness, is famous over the whole world for its peculiar suitability in ironfounding. The manufacture of steel was afterwards spoken of, and the principles underlying the processes of making blister steel, tilted steel, crucible steel, Bessemer steel, &c. were described. The lecturer then turned to the lecture to illustrate the several processes described, and the lecturer concluded with an account of the metallurgy of tin, and the manufacture of tin plate as pursued at the works of the Coalbridge Tin-Plate Company.

"The Preservation of Iron Ships" is the subject of a short, but important, communication from Mr. Young, of Kelly, in the last issue of the proceedings of the Royal Society of Edinburgh. Shipowners, as well as shipmasters, have long been annoyed by the iron rust attacks which have been made by the sea on sailing vessels, and on iron vessels. This action is more particularly noticed in composite ships, where the copper bolts rapidly set up galvanic action, and thus promote the solution and oxidation of the iron. The remedy proposed by Mr. Young, and actually put into practice by him in his yacht (the *Nyanza*), is exceedingly simple. It consists in adding a small quantity of lime to the bilge-water until it becomes permanently alkaline, when all solvent action is at once arrested. It has been experimentally shown that bright iron-wire preserves its lustre practically unimpaired for any length of time when kept in a lime-water solution; and time has shown that the same result is produced by the water in its natural condition. The remedy is so very easily applied, and is so inexpensive, that it is well worthy of the attention of shipmasters. The attention of the Admiralty should also be drawn to this fact, as the loss of the unluckily *Megara* was attributed to the corroding action of bilge water.

The largest merchant steamship in the world (the Great Eastern) is owned by Messrs. P. & O. Ltd., London, and is owned by the City of Chester, and is owned by the Liverpool, New York, and Philadelphia Company. Her dimensions are:—Length over all, 458 ft.; breadth, 44 ft.; depth, extreme, 38 ft.; moulded, 36 ft.; gross tonnage, 4500; engine power, 900-horse; 15 boilers, 30 furnaces. Passenger accommodation—1st class, 152; 2d class, 1310; crew and ship's company, 155. Expected speed, 17 knots. Within two years, it is expected that this ponderous vessel will be replaced by one 500 tons larger, by the same firm.

There has been a fall in mine and mineral shares this week, especially Shotts, Tharsis, and Emma; the two former have slightly recovered, the latter is 20s. under this day week. Merry and Cuninghame, and Huntington Copper and Sulphur shares have slightly improved, and Young's Paraffin close at an advance.

April 3.—The aspect of the Iron Trade in South Staffordshire has not improved since our last report. The transactions of the past week have been few and unimportant either in pig or finished iron. Quotations remain on the basis of 16*l.* for marked bars of good brands, and 20*l.* to 22*l.* for sheets (singles). Pigs are without change at 8*s.* 5*d.* to 8*s.* 10*d.* for best brands of native all-mine. The Coal Trade is exceedingly buoyant, and quotations are quite as firm as last reported. In the Thick-coal district the whole of the masters are under notice for a further wages advance of 1*s.* per day. The notices expire on Saturday, and up to the present moment the masters adhere to their determination not to concede the demand. The general impression is that the men will have too much good sense to strike at existing wages.

Coal and iron companies in and around the South Staffordshire district are just now in considerable favour as investments. As we ventured to predict last week, the required capital of Messrs. John Bagnall and Sons (Limited) was considerably more than subscribed during the few days that the application list was kept open, and we understand that the application for shares in the Pelsall Coal and Iron Company have been very numerous. A share in the Sandwell Park Colliery Company (Limited), on which 80*l.* had been paid, sold on Tuesday for 200*l.* The Cannock and Huntington Colliery Company, a new Cannock Chase enterprise of great promise, will be launched in a few days. The capital has been fixed at 100,000*l.* of which we understand that more than one-half has already been privately subscribed.

The Examining Board for the South Staffordshire and East Worcestershire districts—which consists of three coalmasters, three mining engineers, and three colliers—have appointed the following gentlemen their qualified examiners of candidates for certificates:—Mr. J. P. Baker, Government Inspector; Mr. W. Bassano, Old Hill; and Mr. John Brown, Cannock Chase. Mr. W. Blakemore will act as secretary.

"Economy in Coal Consumption" was a subject of an able and practical paper read on Monday before the South Midland Institute of Mining Engineers, by Mr. E. B. Marten, C.E., of Stourbridge. The paper, as will be seen from the report which appears elsewhere, referred to domestic consumption, and favourably referred to the well-known invention of Captain Galton. At the same meeting, Prof. Beckett, F.G.S., supplied valuable data bearing on the connection of the South Staffordshire and Shropshire coal fields, which data had been afforded by the highly satisfactory results of the recent boring on the estate of the projected Cannock and Huntington Colliery Company.

In the North Staffordshire district new business in the iron trade is of an unimportant character, the demand having, it is believed, been checked by the high quotations. Crown bars are quoted as high as 14*l.* 10*s.* to 15*l.* per ton. The decline in the demand is especially noticeable on account of the United States market, which is usually at this season of the year so important a customer to this district.

There were down for hearing yesterday, at the Police Court at Bilston, sixty summonses against colliers at the Hop Yard Colliery of Messrs. Smith, the charge being that they had left without lawful cause. The pit's company came up on March 31, and put the pit to play, and this seemed to have been done because one man at work there was not a member of the Miners' Amalgamated Association.

April 3.—The supply of coals in Durham is being gradually increased, and some descriptions are becoming more plentiful, which has caused a fall of some extent to take place this week. The coal fields lately offered for disposal have, as might be expected, been keenly competed for, and most of them are disposed of at good prices, considerably in advance of the rates formerly paid for coal royalties. The Whitley royalties, lying on the coast north of Shields, have been disposed of, and some of the old shafts will be opened and new shafts also sunk. At Whitley and Hartley coals were worked at a very early date, but coal working ceased here about twenty-five years ago, although the mines were by no means exhausted. It was at Hartley that the famous steam coal was first discovered, which has contributed so much to the mineral wealth of the North of Eng-

land, but it was not much more than 3 ft. in thickness when first discovered; but at Netherton, Bebside, and other places north and west from Hartley, this famous coal has been found varying from 4 ft. up to nearly 6 ft. in thickness. Colliery workings will also be extended shortly in the Plassetts, North Tyne, as a coal field belonging to the Duke of Northumberland there has been disposed of, and it will shortly be opened out. The Widdrington coal also, in extent 500 acres, will be disposed of in a few days, and operations will be commenced shortly for the purpose of opening this out. The Hartley steam coal, referred to above, is found there in great perfection. As fine weather appears now to have set in it is likely that a considerable falling off in the demand for house coals particularly will be experienced, and a reduction to some extent of the prices of most kinds of coal may be confidently looked for.

Ventilating Fans are making good progress in this field, and some have been introduced lately in Scotland. As coal has now become so valuable an article the ventilating fan is of great importance, as by its use a great economy is effected in the consumption of fuel. It is to be hoped that the Government will be lately respecting the granting of certificates to mine managers. Many men of large experience in the county of Durham having been refused certificates, which they justly consider they are entitled to: but as a deputation has been sent to the Home Secretary about this question it is hoped that a remedy will soon be applied.

Amongst those gazetted as Inspectors of coal and certain other mines under the Act of 1872 is the name of Mr. J. B. Atkinson. We believe this gentleman was a prizeman at the Newcastle College of Physical Science; and if this be so, the appointment must be as gratifying to the College as to himself, since it is well known that the appointment is not obtainable until after a very severe test of a candidate's practical and scientific knowledge.

test of a candidate's practical and scientific knowledge.

On Saturday last the officials of Springwell Colliery, together with a few friends, entertained Mr. JOHN PEELE, their resident viewer, to an excellent banquet on the occasion of his leaving to take a more important station at Wharfedale Colliery. The guests were supplied with a sumptuous repast in the Hall, and the vice-chair by Mr. John Nixon, the cashier at the colliery. After the repast Mr. R. Davis presented Mr. Peel, in the name of the workmen of the colliery, with a handsome timepiece and a purse of 50 guineas, and a gold brooch to Mr. Peel; and in doing so passed a high eulogium upon the merits of that gentleman, unbegrudging that he was going to leave the colliery after a period of thirteen years' service among them, during which he had made many friends, and earned the esteem of the whole body of workmen of the colliery. After Mr. Peel had responded in feeling terms to the speech of Mr. Davis, other toasts were proposed and a pleasant evening was spent.

COAL-CUTTING MACHINES.—These machines continue to attract much attention here, therefore put down at Huddersfield, where several others are to be used shortly. The sale at other works, the recent invention of Messrs. Hurd and Simpson, of Wakefield, is to be tried in this district shortly. By this machine an air-compressor can be put in at any point in the workings, and the air compressed by means of horse-power when no available machinery is at hand, so that the expensive machinery usually required is dispensed with. The patentees also offer to erect their machinery at any works, and to cut the coal at any rate, and to supply the coal so convenient to many parties, and, no doubt, will lead to the extensive use of the machines, as men are now scarce, and coal cutting by hand labour is very costly.

April 3.—Although the great strike is over but little iron has been manufactured during the past fortnight, owing to so much time being taken up in re-lighting the blast-furnaces and putting things right for the general resumption of work. Manufacturers are, therefore, not yet in a position to enter into transactions freely, and little or nothing can be said as to the state of the Iron Trade, and yet the prospects as to the future demand are good, and the renewal of prosperity is looked for. Quotations are not exactly fixed, but the general prices for railway iron are firm, 11*l*. to 12*l*. per ton. Pig is in large request. There seems to be some apprehension among the ironworkers and colliers that the masters will not, after all, pay the old rate of wages from the 1st. inst., as was understood when they resumed work. The only ground for this apprehension appears to be that someone put the question to the manager of one of the large works, and that the reply was that the masters would not make any definite promise at present. The managers must wait, and it will be hardly surprising if there be some interruptions yet in operation.

The Ebbw Vale Steel, Iron, and Coal Company have made a call of 17. 10s. per share. The works of this company are at work again, and considering all things there was not much time lost in getting the establishment into working order after the strike. A full dozen furnaces were re-lighted at the beginning of the week, and operations have been carried on actively since.

The week, and operations have been carried on actively since. At the Tin-plate Trade, there was a little improvement in the market. The Tin-plate Company's works at Pontymool have sent a ton of fuel, iron and other materials to the Pontynewydd works at Pontymool. The quarterly meeting of the trade was held at Newport, on Wednesday, Mr. P. Woodruffe, of the Machen Works, in the chair. There was a large attendance of manufacturers, and representatives of the leading firms were also present. The position and prospects of the trade were discussed at some length, and it was decided to advance the price of fuel, iron and other materials necessitated a further advance in the price of tin-plates. It was resolved that the price of the best charcoal tin-plates be advanced to 44s. and the ordinary do. to 38s. per box at the shipping ports. It was further agreed that the difference between the two grades of tin-plates be 6s. instead of 5s. as heretofore. The members were then adjourned, together, after the meeting.

about the same degree of activity is to be noticed in the Steam Coal trade, and a corresponding demand for all qualities for home and foreign use, with every prospect of a continuation of prosperity and higher prices. The house coal colliers are agitating for an advance of 6d. per ton in the price for cutting coal. Some of the colliery proprietors have admitted that the advance is due to the men, and propose to give 3d. per ton advance from the 1st inst., and another 3d. from the 1st of May. Of course, the men naturally ask why the masters should advance the whole advance at once, inasmuch as they have admitted that they are entitled to it.

The Amalgamated Association of Miners held their half-yearly meeting at Newport, commencing on Tuesday, Mr. Halliday presiding. There were altogether 290 delegates present from various parts of England and Wales. The financial statement showed that the increase in the number of members of the Association during the last six months had been from 70,536 to 86,623, being over 16,000. The special levies made during the late strike had been 12s. per member. At the conference held in Walsall in October last year the balance of funds in hand was 4524. 17s. Since then the ordinary contributions received amounted to 855s., and the special levies and donations from kindred associations amounted to 14,425s. The balance in hand was now 54,265s. Out of this there had been paid to the men on strike in South Wales 33,380s., which left a balance of over 20,000s. The leaders have every confidence in being able to cope with masters in any future struggle.

April 3.—Lead mining in Derbyshire is looking just now rather brighter than it has done for some time past, not only in the Eyam but in the higher districts. Increased capital is also making itself felt, and the output of the present year will, in all probability, be in excess of several previous years. The Coal Trade is looking well, but the mild weather has told on the demand for household qualities, and in some instances has led to a reduction in the prices. There is scarcely so much doing with the metropolis as there was a week or two since. New collieries are being opened out in all directions, and there is quite a rush to purchase coal fields of any extent, and for which higher prices than usual are being obtained. Particular attention just now is being paid to Nottinghamshire, where the Mansfield and Agecroft is in prospect, but which has not yet been broken into. Collieries at work have also been enquired after, with a view to purchase, and prices which a year ago would not even have been dreamt of are now offered. Several concerns have either passed, or are about to pass, into the hands of limited liability companies, so that coal mining may be said to have been somewhat revolutionised of late, owing to the high prices which have been charged. In the Dronfield and Unstone districts new pits are about to be opened out, whilst at Mansfield and Agecroft the new pits have been started, and are already used as a mill, and are fitting it up as a machine works for the production of waxes, sickles, tools, &c., which it is proposed to manufacture on a large scale.

The Iron Trade in all parts of Derbyshire is in a healthy state, and the mills and forges are doing good business. The production of pig-iron is also large, but not more so than the demand. The wages question at the collieries at Dronfield and other places in the county has been arranged, the men receiving an advance of 20 per cent. on the prices paid in 1871. The refusal of certificates to several underground managers by the Home Office is creating a good deal of excitement. The Bill for the regulation of the trade in Explosives will have to give way, as the Act has really not been acted upon as yet, for the special rules as drawn up appear to be satisfactory to neither masters or men.

Some branches of the Sheffield trades are now considerably quieter than for a long time, the orders left over at the close of last year having been worked up, and not been replaced to anything like the same extent. The heavy plate mills are working favourably, whilst there is still a rather brisk demand for ship and boiler plates. Manufactured Bessemer of every description, including rails, tyres, springs, axles, and rods, is in active request, and the makers are full of orders that will occupy them for some time. The trade in cutlery is also moderate but brisk, and the fine and cheap cutlery cutlery. Rifle barrels are being extensively produced, as are other crucible steel goods. The coal trade in South Yorkshire is much quieter, but prices have undergone no change, although it is not expected that the present rate for households can be maintained much longer.

On Wednesday afternoon there was a meeting of the Midland Institute of Mining Engineers at the Victoria Hotel, Sheffield, the programme including a discussion on "Blown out Shots," a paper read at a previous meeting, by Mr. J. Warburton, of Leeds.

A handsome testimonial has been presented to Mr. J. Warburton, mining engineer, and late manager of the West Riding pits. Mr. Warburton is one of our leading engineers, is well known, not only in Yorkshire but in Lancashire also, and will be remembered by the readers of the *Mining Journal* as having contributed some valuable articles. The presentation was made at a large meeting at the Station Hotel, Normanton, and the occasion of the testimonial was his leaving the district to reside in Leeds, where he is now located as a consulting engineer. The chair was occupied by Mr. W. Dixon, and the presentation made by Mr. W. Evans, who said it was with a degree of unusual pleasure that he rose to make the presentation to

Mr. Warburton, and to assure that gentleman that the hearts and hands of the workmen of the West Riding pits were with him. As a manager, he had ever been kind and considerate to the men employed under him, whilst his great practical abilities and energy had been devoted not only in securing the safety of the miners but of the collieries as well, and that with signal success, as shown by their comparative freedom from accidents. His time and talents were given to the benefit of the men, and he felt sure that there was not one of them but would be happy to serve under him again. The testimonial consisted of a very fine and valuable silver watch, with all the instruments attached. Also a 14-ft. level staff, and 12-in. protractor, the whole being furnished by Messrs. Hurdley and Davis, of Leeds. On the arm of the dial was inscribed, "Presented to Mr. J. Warburton by the workmen of the West Riding Collieries as a mark of regard for his services to the management of the same. Normanton, March 8, 1873." The acknowledgment was particularly appropriate and practical, and the proceedings throughout were of a very harmonious and interesting character.

REPORT FROM LANCASHIRE AND CHESHIRE.

April 3.—The result of the dispute in this district concerning the Special Rules framed by the employers was a strike on Friday last at the pits in the neighbourhood of Tamworth and Kearsley, and on Saturday it was reported that between 3000 and 3000 men were idle. Early this week, however, they took a different view of the question, and resumed work; in fact, some of them went in on Saturday, and the bulk have now resumed their employment. A deputation was appointed to wait upon Mr. Dickinson, the Government Inspector of Mines, upon the subject.

The members of the board for appointing examiners of managers of mines in the North and East divisions of Lancashire are announced. They include the following:—Messrs. John Knowles, Pendlebury, Manchester; E. Pilkington, Clifton and Kersley Collieries; and H. Bolton, Baxendale Collieries, Accrington. Persons employed in or about mines: Messrs. Isaac Wardle, Kearsley; T. Guggen, Tamworth; and S. Browne, Oldham. The board for the West Lancashire district includes:—Owners of Mines: Thomas Knowles, Ince Hall, Wigan; W. Pilkington, St. Helens; and Alfred Hewlett (Wigan Coal and Iron Company). Engineers: George Gilroy (Ince Hall Collieries), and W. J. L. Watkin, (Pemberton Collieries). Persons employed in and about mines: John Howard, Hutton Quarry; George Bailey, Platt Bridge; and J. T. Kennedy, Aspull.

The Wigan Coal and Iron Company half-yearly report shows a net profit for the half-year ending December last of 153,583. The directors recommend a dividend after the rate of 12½ per cent. per annum, which will absorb 108,583; and they have placed to their reserve fund (the formation of which is recommended by the directors, on the ground of the uncertainty of mining adventure, and the great and increasing difficulties of the labour market) a sum of 50,000, in addition to 22,000, similarly set aside last half year, leaving to be carried forward 17,525; 30,885, has been deducted for depreciation, and 3000, added to the plant account, which now stands at 1,667,825. The net profit for the half year ending June, 1872, was 104,788.

The Coal Trade continues easier, but the Iron Trade is still in a very unsettled state, and at present there does not seem much prospect of improvement.

COAL TRADE.

Mr. J. R. Scott, the Registrar of the London Coal Market, has published the following statistics of imports and exports of coal into and from the port and district of London, by sea, railway, and canal, during March, 1873:—

IMPORTS.			
By sea.	Tons.	By Railway and Canal.	Tons.
Newcastle	179	London and North-Western	93,324 13
Seaham	11	Great Northern	77,934 6
Sunderland	100	Great Western	71,113 8
Middlesbrough	2	Midland	139,343 0
Hartlepool	45	Great Eastern	50,747 2
Blyth	1	South-Western	5,155 11
Scotth	13	London, Chatham, and Dover	36 0
Welsh	5	South-Eastern	971 10
Yorkshire	41	Grand Junction Canal	983 5
Small coal and clinders	13		
Total	410	Total	440,008 9

Imports during March, 1872, 415 Tons. Imports during March, 1873, 430,755 19

COMPARATIVE STATEMENT, 1872 AND 1873.			
Jan. 1 to March 31, 1872	Tons.	Jan. 1 to March 31, 1873	Tons.
Jan. 1 to March 31, 1873	1,231,788 0	Jan. 1 to March 31, 1873	1,215,519 0
Decrease in the present year	92	Decrease in the present year	35,969 0

Export List, showing the distribution of coal imported into the port or district of London, by sea, rail, and canal, and afterwards exported coastwise or to foreign parts, or sent beyond limits of London district, by rail or inland navigation, during March 1873:—

Exports.	Tons.
Railway-borne coal passing "in transitu" through district	70,724
Seaborne coal exported to British possessions, or to foreign parts, or to the coast	53,392
Coal sent beyond limits by railway	10,109
Coal sent beyond limits by inland navigation	3,977
Railway-borne coal exported to British possessions, or to foreign parts, or to the coast	21,758
Coal sent beyond limits by inland navigation	124
Seaborne coal brought into port and exported in same ships	21,892
Total quantity of coal conveyed beyond limits of coal duty district during March, 1873	141,711
Coal during March, 1872	147,713

Comparative Statement, 1872 and 1873. Total distribution of coal from Jan. 1 to March 31, 1872, 428,425. Total distribution of coal from Jan. 1 to March 31, 1873, 422,233.

Decrease in the present year 6,189

IMPORTS AND EXPORTS.

COMPARATIVE STATEMENT, JAN. 1 TO MARCH 31, 1872 AND 1873.			
Imports by sea	Tons	Imports by railway	Tons
Imports by sea	39,850	Imports by railway	39,850
Less decrease in exports	75,619		
Net decrease in trade within the London district	69,430		

THE COPPER TRADE.

There has been a larger trade throughout March than for some months previously, consumers being very free buyers as well as speculative operators; the result has been a rise of 7½ in foreign copper and 5½ in English. Stocks are reduced about 2000 tons. The imports compared with last year show a considerable reduction, whilst exports have considerably increased. All descriptions of the stock here have decreased, the only exception being foreign copper in Havre, which shows an increase of 840 tons. The smelters have been amongst the buyers taking good quantities of ores and regulus, and have freely sold English, both raw and manufactured, for delivery well into the current quarter. The first two months' shipments from the West Coast are 6300 tons only, the available stock to March 15 being estimated at 4700 tons; so far it would appear that no increase in Chili produce need be apprehended; on the other hand we have very full supplies of Australian, that here and abroad being still little short of 10,000 tons. The Indian markets are somewhat lower again, the smallest importations seeming to satisfy all demand. Yellow metal has been advanced ¼d per lb., brass wire ¼d., tubes ¼d. The imports of copper into England for the first two months of the following years, were:—1870, 6289; 1871, 11,345; 1872, 15,312; 1873, 10,266. The exports for the same periods, were:—1870, 9481; 1871, 3768; 1872, 5653; 1873, 8424.

The position from April 1, 1872, to April 1, 1873, was as follows:—

Price.	Stock on hand.	Stock, including afloat.
1872—April 1	297 0 0	19,507
May 1	101 0 0	21,435
June 1	107 0 0	21,595
July 1	104 0 0	23,213
Aug. 1	103 0 0	27,753
Sept. 1	99 0 0	27,922
Oct. 1	84 0 0	28,910
Nov. 1	86 0 0	30,753
Dec. 1	86 0 0	32,091
1873—Jan. 1	87 0 0	32,432
Feb. 1	85 0 0	32,180
March 1	92 0 0	30,398

And the comparative positions at the same date of the past four years with the present are as follow:—

Price.	Stock.	Stock, including afloat.
1869—April 1	271 0 0	23,495
1870—April 1	66 0 0	24,802
1871—April 1	64 0 0	34,568
1872—April 1	97 0 0	19,507
1873—April 1	92 0 0	30,398

Messrs. James and Shapcaren.—Sales of furnace material have been confined to a cargo of 370 tons ore, 450 tons regulus, to arrive at Liverpool, at 17s. 9d. per unit. The small stock now in England is held for higher rates. Bars show an advance since March 28 of fully 50s. per ton, and the transactions therein amount to 3575 tons. At the close there was business doing at the full rates, with a moderate quantity offering thereat. It seems evident that the Chili production scarcely exceeds 36,000 tons per annum, even if it comes up to that quantity, the exports from Sept. 3, 1872, to March 3, 1873, having been 18,000 tons (the stock there remaining unchanged), or an average of 3100 monthly; and for the last three months of that period they were 8650 tons, or 2850 monthly. In Australia the sales amount to 1540 tons; 205 thereof being Barra, from 55s. 5d. to 99s. 10s. cash, and 97s. with prompt; the remainder, Wallaroo from 99s. to 99s. cash, 97s. to 99s. 15s. with extra prompt. Of Japan 25 tons Rosette sold at 99s.

cash. English has likewise been in excellent demand, and the smelters are now asking full official quotations.

COPPER.—(Messrs. Vivian, Bond, and Watson, Liverpool).—Arrivals from West Coast S.A. during the past month—Huang Ho, from Carrizal Bajo, with 720 tons regulus; Palestine, from Callao, with 140 tons regulus; Aconagua, from Callao, with 28 tons tons Barilla; Caribean, from Colon, with 8 tons ores; John Elder, from Arica, with 85 tons Barilla; John Elder, from Coquimbo, with 100 tons bars; John Elder, from Guayaquil, with 400 tons bars and 220 tons ingots; Naupante, from Lota, 45 tons bars. At Swansea—Marquis of Worcester, from Chancay, 566 tons ores; Marquis of Worcester, from Duendes and P. Blanca, with 39 tons regulus; Glenual, from Duendes and P. Blanca, with 362 tons regulus and 413 tons ores; Powhattan, from Pan de Azucar, 610 tons regulus; Hampshire, from Carrizal, 770 tons regulus; Lord Marmion, from Callera, 140 tons regulus and 318 tons ores; Foxhound, from Pena Blanca, with 700 tons regulus. Stocks of copper (Chilian and Bolivian) are as follows:—

	Bars.	Ingot.	Barilla.	Regulus.	Ores.
Liverpool	15,000	752	105	921	307
Swansea	4,528	—	—	1845	889
Total	19,528	752	105	2766	1196

Equals about 21,986 tons fine copper, against 12,907 tons March 31, 1872; 23,200 tons March 31, 1871.

Messrs. Vivian, Younger, and Bond.—The reduction in the stocks during the past month, as shown by the annexed statistics, has attracted the attention of manufacturers and speculators, especially the former, who have made considerable purchases, and a large business has been done at advancing prices. There appears to be only moderate quantities of copper on the way, and it is anticipated that the deliveries will continue good. Looking at the position of the article, there seems to be no reason why the average advance of 3s. to 4s. per ton which has taken place should not be established, and even higher prices attained. After our last issue the copper market continued steady, but rather quiet, with Lota bars at 99s. good ordinary brands at 98s. 10s. to 99s., and Wallaroo 98s. 10s. to 99s., cash terms. Until Monday, when a strong demand sprang up, which has since continued, and Lota has been paid up to 92s. and good ordinary brands 92s. 10s., while Wallaroo has advanced to 99s., and Barra 98s. 10s., cash terms. There has also been a good demand for English copper, principally manufactured, and about 400 tons were sold yesterday, at 96s. to 98s. for tough, and 100s. for sheets. On the 27th ult. 625 tons of Chilian regulus were sold at 17s. 6d. per unit, Liverpool, and on the 28th the cargo per North Glen, consisting of 370 tons of ores, and 450 tons of regulus at the same price. We estimate the business done at about 5000 tons. The Board of Trade Returns for the United Kingdom, the imports and exports of copper during the first two months of the following years, estimated in fine, was as follows:—

IMPORTS.			
	1873.	1872.	1871.
Copper in ores and pyrites	3,150	3,384	3,113
Ditto in regulus	2,367	4,263	1,916
Ditto in bars, &c.	4,940	7,668	6,345
	10,457	15,315	11,404
EXPORTS.			
	1873.	1872.	1871.
Manufactured copper, &c.	2,302	2,702	2,252
Unmanufactured ditto	2,637	1,472	1,007
Foreign ditto	2,640	880	509
	8,425	5,054	3,768

The Swansea and Liverpool arrivals and deliveries of Chilian bars, ores and regulus in fine were as follows during:—

	March, 1873.	March, 1872.	March, 1871.
Arrivals	3,300	2,350	2,390
Deliveries	5,700	2,950	1,500
The quantity of Chilian bars, ores and regulus in stock at, and afloat for, Liverpool, Swansea, and Havre, and of English and Foreign copper in London, is thus estimated in fine copper:—			
April 1, 1873.	April 1, 1872.	April 1, 1871.	
Stock	30,457	19,507	34,568
Chili produce afloat and chartered	7,400	11,400	10,600
Total	37,857	30,907	45,168

Stock April 1, 1873. March 1, 1873. Feb. 1, 1873.

	April 1, 1873.	March 1, 1873.	Feb. 1, 1873.
Stock	30,457	32,369	31,882
Chili produce afloat and chartered	7,400	9,600	10,500
Total	37,857	41,969	42,382
Australian produce afloat	1,600	1,600	2,050

Quotations of English Tough and Chili bars, ores and regulus, were as follows:—

	April 1, 1873.	April 1, 1872.	April 1, 1871.
Tough	91 0 0	97 0 0	65 0 0
Bars	91 0 0	97 0 0	65 0 0
Ores and regulus	0 17 9	0 18 9	0 13 0

The actual exports of bars, ores, and regulus in fine copper from Chili during the first month of the following years were as under:—1873, 3000 tons; 1872, 3800 tons; 1871, 4000 tons.

Messrs. Fry, James, and Co.—Copper has had great attention from exporters, consumers, and speculators, resulting in an advance of about 6s. per ton in a fortnight on all foreign copper, and about 4s. per ton on English. The chief cause of this improvement is the ascertained reduction of stocks in Europe and afloat. The present excess of supply, which stood last month at 12,500 tons, is reduced, on the 1st inst., to about 8000 tons, as compared with the corresponding period of last year. Notwithstanding this still large excess the present market corresponds with the state of last year, there being a great confidence in the future of the part of the public. It is believed that the speculators whose avarices caused the collapse of last Autumn are now being replaced by a less numerous and stronger body, thus favouring the chances of the higher rates being maintained.

TIN.—Messrs. Van Houten and Ebeling (Rotterdam, March 31) writes.—Tin was inactive in the beginning of the month, but since the announcement of the spring sale the market has been very excited, and prices have materially advanced. The spring sale, comprising 75,163 slabs Banca, will take place on Wednesday the 2nd prox. Banca was in moderate enquiry at 84 s. in the early part of the month, but during the last week the demand has been very large, causing an advance to 87½ s. and 8 s. 8 d.; last week some sales were reported at 87 s. 6 d. for contracts for delivery ex spring sale, after rising from 84 s. to 85½ s., declined to 86½ s., from which there was a recovery to 87 s. Banca has been in great request for export, and the supply being considerably reduced, the price improves from 82 s. to 83 s. In parcels "to arrive," an extensive business has taken place: from 82 s. the price advanced to 87 s., subsequently fell to 85 s., closing at 86½ s. The directors of the Billiton Company have given notice that henceforward 9000 pounds will be offered in the bi-monthly sales at Batavia, commencing with the sale advertised for Monday the 8th inst. The position of Banca tin in Holland on March 31, according to the Official Returns of the Dutch Trading Company, was as follows:—

	1873.	1872.	1871.
Import in March	55,245	9,134	9,715
Total three months	55,245	29,100	27,485
Deliveries in March	9,400	6,200	7,500
Total three months	22,701	21,895	29,390
Stock second-hand	11,751	12,200	41,600
Total stock	133,599	70,337	149,184
Afloat	23,628	12,750	15,590
Statement of Billiton:—			
	Slabs	2,900	3,921
Import in March	10,450	9,121	6,751
Total three months	3,345	2,300	2,400
Delivered in March	20,290	4,850	5,100
Total three months	5,003	5,027	3,051
Stock	9,325	3,630	11,365
Afloat	87½ s.	91 s.	75½ s.
Quotation of Banca	87½ s.	91 s.	75½ s.
Mar. 31 Billiton	87½ s.	91 s.	75½ s.

These combined returns of Banca and Billiton for 1873, compared with those for 1872, exhibit an increase of the import for March of 55 tons, an increase of the import for the three months of 551 tons, an increase of the deliveries for March of 131 tons, an increase of the deliveries for the three months of 445 tons, a decrease of the stock second-hand of 14 tons, an increase of the unstocked stock of 1979 tons, an increase of the total stock of 1965 tons, a decline of the quotation of Banca equal to 97.3s. per ton.

The Government returns for the month of January are as follows:—

EXPORT OF TIN FROM HOLLAND.			
	January.	Two months.	1870.
Germany	1873.	1872.	1871.
Tons	155	12	121
England	155	12	121
Belgium	89	159	22
France	21	5	26
Hamburg	15	20	—
United States	—	—	—
Other countries	1	9	22
Total	555	463	328

MINING IN RUSSIA.—According to a report from the Mining Department of St. Petersburg, the number of mines at work in Russia is 1256 (principally Siberia); platinum, 8; silver, lead, 26; copper, 71; iron, 1283; nickel, 1 in the Caucasus; tin, 1; arsenic, 2; chrome, 9; coal, 193; rock salt, 4; naphtha and petroleum springs, 772. The metal works comprise 130 furnaces for smelting silver, 262 for copper, 128 for zinc, 245 iron blast furnaces, 448 puddling furnaces, 689 rolling and heating furnaces, 485 steel cementing furnaces, 924 iron forges, 161 cupolas, and 93 reverberatory furnaces. The mines and metal works employ 154,197 persons, independently of the gold and salt works, which have 49,196 and 40,600 respectively, making in all 203,993 persons. The motive power employed is derived from 482 steam-engines, and 2223 water wheels or turbines, of an aggregate of 54,255 horse-power.

AMERICAN IRON MANUFACTURE OF 1872.—The Pig-Iron Manufacturers' Association had a meeting in New York on Feb. 19, at which 31 companies were represented. The secretary's report showed that the make of 1872 amounted to 2,388,250 tons, divided as follows:—Anthracite, 1,197,010; raw bituminous and coke, 712,580; charcoal, 478,590. During the year 169 furnaces were built and 39 projected, and 43 rolling mills built and 11 projected. This gives a total of 199 new establishments; and the most gratifying thing about this exhibit is that the increase of rolling mills, which stand toward blast furnaces in the relation of consumers, has kept pace with the number of blast furnaces themselves. Allowing 327,000 tons for the increase of the pig produced, we have 59 new mills and an expansion of the existing mills amounting to 30 per cent. of their former capacity, to make away with the increase. Mr. Dunlap calculates that the country used 4,654,618 tons of iron in 1872, including 400,000 tons of American scrap. In fact, of the above total 110th was American scrap, 3-10ths imported iron, 6-10ths American pig. This was consumed as follows:—In castings, 1,163,000 tons; in railroad supplies, 3,478,500; and in other wrought-iron products, 330,000 tons. Total, 4,311,000 tons, which balances the other side of the account sufficiently near for approximate calculations. The increase in ore production is put at 150 per cent. of that for 1870,

the present extraction being about 6,400,000 tons. Five Bessemer works are now in operation, and used in 1872, 125,381 tons of pig. The Bessemer rail production was about 90,000 tons. At least four new establishments are projected. The report while exhibiting a most flattering picture of our progress towards supplying our own iron, is still more encouraging in the proof it gives towards the supply of our productive power within late years has not only not retarded the supply, but has fallen very far short even of answering the needs of the country.—*Engineering and Mining Journal* (New York).

IRISH PEAT MANUFACTURE.—Some arrangements have been made at Athlone, Ireland, for the purpose of testing the value of modern machinery in connection with the manufacture of peat fuel. Owing to the facilities afforded by the directors of the Midland Great Western Railway, Mr. Francis Harvey, of Athlone, in charge of several of his workmen, the peat machine which is now manufactured, and which it is hoped will be extensively used for the purpose of making experiments. The *peat* extractor forms an important portion of the machinery, which is furnished at one end with a strong knife, for the purpose of cutting the peat, and with each lift it will bring up about 11 ft. of the material. The peat will take place, in order to reduce the peat to a state, where the cutting of the peat will be made rapidly carried out.—*Iron*.

TUNNELING MACHINERY.—The invention of Mr. B. SHERRIN, of Beverley, Salop, and Mr. F. STUCKEY, of Morthby Tydfil, for improving machinery or apparatus for tunnelling and excavating, and for other like purposes, consists of the following improvements in the said machinery or apparatus:—The machine or apparatus is supported upon a travelling base plate, in which a fixed hollow shaft, in which a tubular shaft advances and retires by a screwing motion. The latter is carried by its front end a series of radial arms, each arm having at its end a bracket supporting one or more of the said chisel-pointed tools. On one or both sides of each of the radial arms is a regular groove or ring, in which a dense air-cylinder, fitted with pistons and piston rods, is arranged. The pistons carry a piston rod carrying a curved tool, and the rear end being provided with a ratchet, by which a slow intermittent rotary motion may be given to the pistons and tool. The tools carried by the piston rods have by these means a progressive action given to them, combined with a slow rotary motion. By the use of the said tools, a series of radial holes is made in the rock, and by the operation of the chisel-pointed tools carried by the brackets on the radial arms a circular groove is cut external to the portion operated on by the percussive tools. Or the percussive tools may be made to produce a series of concentric grooves or rings by the slow continuous motion of the inner tubular shaft and radial arms. The machine may be worked vertically or horizontally.

REFINING STEEL.—Messrs. Haseltine, Lake, and Co. (for Mr. J. SEVERANCE, Indiana, U.S.) have patented an improved process and machinery for tempering and refining steel. The inventor says:—"I first heat the steel in a cherry-red in a clean smith's fire, and then cover the steel with a layer of common salt, purifying the fire also by throwing in salt. I work the steel in condition, and while subjected to this treatment until it is brought into a finished form. I then substitute for the salt a compound of sulphate of copper, soda, sal ammoniac, alum, nitrate of potassium, and rock salt."

LUBRICATORS.—Mr. W. H. BAILEY, of the Albion Works, Glasgow, and Mr. J. WESTLEY, of Hulme, have invented some improvements in machinery for steam-engine and other cylinders, the features of novelty in which consist in constructing a lubricating cup for steam engine and other cylinders which will be of regulating the flow of lubricating material to the greatest nicety, and will be supplied with fresh lubricating material without removing any cover, lid, or part, and also without stopping the engine. This is accomplished by the application of an acute angled inverted plug mounted in a suitable seating at the end of the interior of the cup, this plug and seating having one or more passages formed through it parallel with the axis of the plug. The valve on the outside of this cup forms the funnel or hopper for supplying from the interior, and has a handle radiating from it for turning such valve, and the mechanism is opened between the funnel and the interior valve, by means of a spindle which passes through a stuffing box formed in the plug before mentioned, and such spindle has a valve at its lower extremity, and a seating at the bottom of the cup leading to the cylinder, and has a non-return valve at its upper extremity for actuating such spindle. By making the spindle the lubricator may be worked on the displacement principle.

PETTING.—Messrs. T. JACKSON and T. SOUTHAN, of Catthorpe, works, Coalbridge, have specified their invention for the application of sand in ore in making and repairing bottoms of heating and re-heating furnaces, and in order to utilise the cinder from such furnaces for setting puddling furnaces. The feature of novelty which constitutes this invention is the employment of iron ore in substitution of sand for making or repairing the bottoms of the chambers of furnaces, used for heating or re-heating iron, having for its object produce a cinder or slag suitable for the setting of puddling furnaces.

TREATING ORES.—Some improvements in the construction of the machines for washing, concentrating, and amalgamating ores of precious metals have been invented by Mr. W. M. RICKARD, of Monitor, Alpine county, Cal., U.S. The raw material and water are placed in a cylindrical drum. A longitudinal shaft, upon which are mounted a series of V and X shaped discs, amalgamated with

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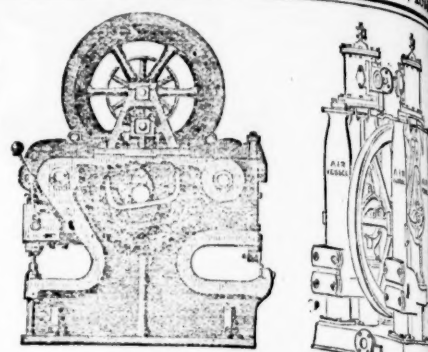
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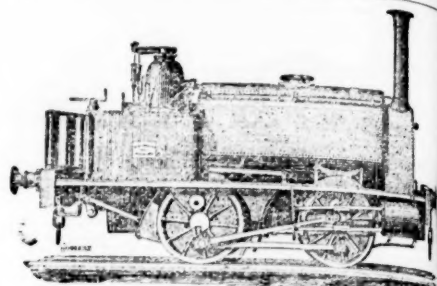
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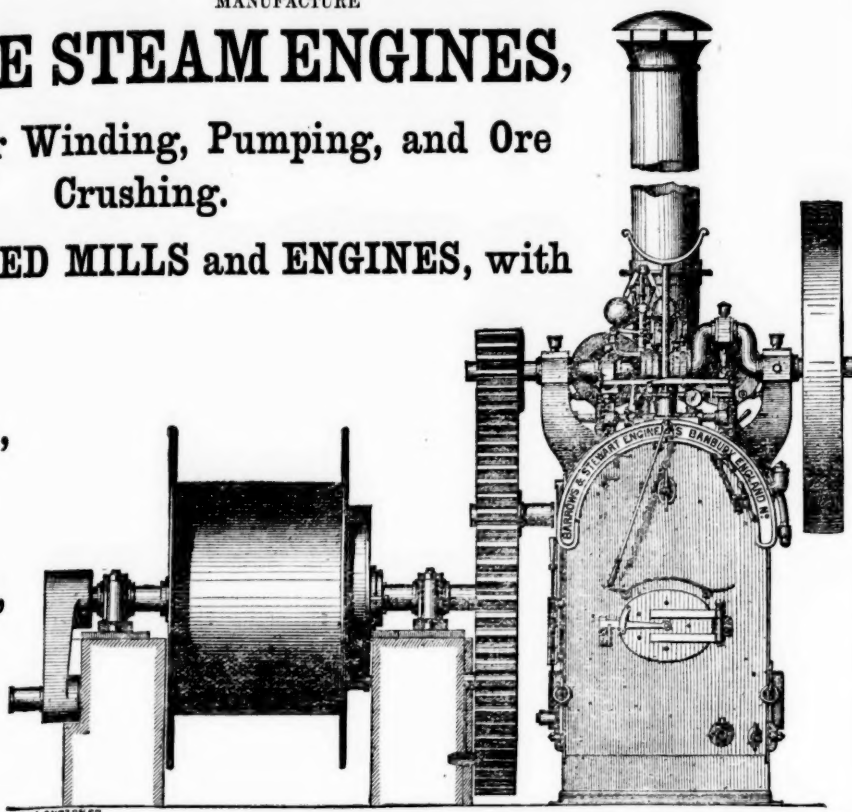
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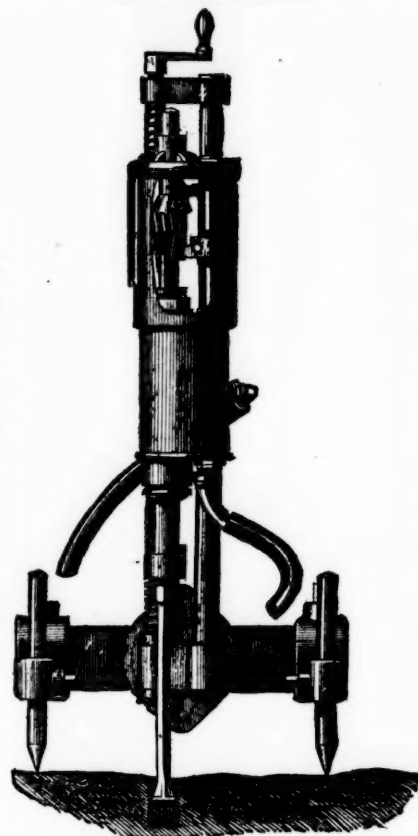
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20000	Alt-y-Crib, t, Talybont	2 0 0	3	2 1/2	0 0 0	0 0 0	Feb. 1873
10000	Belvidere Beacon, t, Roche (3000 Bsh.)	1 10 0	—	—	0 2 0	0 1 6	Jan. 1873
5000	Bladen Caelan, s, Cardigan (24 sh.)	3 5 0	—	—	0 5 0	0 5 0	—
18000	Boscawell Downs, t, c, St. Just	3 0 0	—	—	0 5 0	0 5 0	—
200	Botallack, t, c, St. Just	81 5 0	—	—	0 5 0	0 5 0	—
4000	Brookwood, c, Buckfastleigh	100 0 0	—	—	0 5 0	0 5 0	—
3345	Cargill, s, Newlyn	4 15 11	—	—	0 5 0	0 5 0	—
4000	Cashwell, t, Cumberland	2 10 0	—	—	0 5 0	0 5 0	—
7500	Castle-a-Dinas, t, St. Columb	2 0 0	—	—	0 5 0	0 5 0	—
1000	Car Brea, c, t, Illogan	35 0 0	—	—	0 5 0	0 5 0	—
2450	Cook's Kitchen, t, Illogan	19 14 9	—	—	0 5 0	0 5 0	—
10240	Devon Gt. Consols, c, Tavistock	0 2 0	—	—	0 5 0	0 5 0	—
656	Ding Dong, t, t, t, t	49 14 8	—	—	0 5 0	0 5 0	—
4506	Dulcote, t, c, Camborne	10 14 10	—	—	0 5 0	0 5 0	—
10000	East Balliswidden, t, c, Sancerre	1 0 0	—	—	0 5 0	0 5 0	—
6144	East Caradon, c, St. Cleer	2 14 8	—	—	0 5 0	0 5 0	—
300	East Darren, t, Cardiganshire	32 0 0	—	—	0 5 0	0 5 0	—
6400	East Pool, t, c, Illogan	0 9 9	—	—	0 5 0	0 5 0	—
2500	Foxdale, t, Isle of Man	25 0 0	—	—	0 5 0	0 5 0	—
3050	Gawton, c, Tavistock	3 10 6	—	—	0 5 0	0 5 0	—
40000	Glasgow Carr, c (30,000 £1 p, 10,000 15s. p.)	—	—	—	0 5 0	0 5 0	—
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10240	Gunnislake (Clitters), t, c	5 2 0	—	—	0 5 0	0 5 0	—
1024	Herodsfoot, t, near Liskeard	8 10 0	—	—	0 5 0	0 5 0	—
6000	Hingston Downs, c, Calstock	6 4 0	—	—	0 5 0	0 5 0	—
25000	Killalee, t, Tipperary	1 0 0	—	—	0 5 0	0 5 0	—
6000	Killfret, t, Chacewater	1 0 0	—	—	0 5 0	0 5 0	—
400	Lisburne, t, Cardiganshire	13 15 0	—	—	0 5 0	0 5 0	—
784	Lovell, t, Wendron	9 0 0	—	—	0 5 0	0 5 0	—
5000	Marke Valley, c, Cardigan	4 0 6	—	—	0 5 0	0 5 0	—
9000	Minera Mining Co., t, Wrexham	5 0 0	—	—	0 5 0	0 5 0	—
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6400	New Pembroke, t, c, Par Station	5 0 0	—	—	0 5 0	0 5 0	—
12000	North Hendre, t, Wales	2 10 0	—	—	0 5 0	0 5 0	—
2000	North Levant, t, c, St. Just	10 12 0	—	—	0 5 0	0 5 0	—
5694	Pedn-a-drea, t, Redruth	8 2 0	—	—	0 5 0	0 5 0	—
5000	Penhalls, t, St. Agnes	3 0 0	—	—	0 5 0	0 5 0	—
6000	Phoenix, t, c, Linkinhorne	4 3 4	—	—	0 5 0	0 5 0	—
1772	Polberron, t, St. Agnes	15 0 0	—	—	0 5 0	0 5 0	—
2000	Polkice, t, c, Gwennap	10 0 0	—	—	0 5 0	0 5 0	—
1120	Providence, t, t, t, t	10 6 7	—	—	0 5 0	0 5 0	—
18000	Prince Patrick, s, t, t, t	1 0 0	—	—	0 5 0	0 5 0	—
12000	Roman Graves, t, Salop	7 10 0	—	—	0 5 0	0 5 0	—
5889	Rosewell Hill and Ransom, t	4 0 0	—	—	0 5 0	0 5 0	—
10000	Shelford, t, St. Austell	1 0 0	—	—	0 5 0	0 5 0	—
6000	Slimeford Dressing, t, Calstock	1 0 0	—	—	0 5 0	0 5 0	—
518	South Caradon, c, St. Cleer	1 5 0	—	—	0 5 0	0 5 0	—
5000	South Caradon, c, St. Cleer	1 17 6	—	—	0 5 0	0 5 0	—
6000	South Darren, t, Cardigan	3 6 6	—	—	0 5 0	0 5 0	—
242	Spearhead, t, St. Just	36 17 9	—	—	0 5 0	0 5 0	—
940	St. Ives Consols, t, St. Ives	10 15 0	—	—	0 5 0	0 5 0	—
8771	St. Just Amalgamated, t	3 10 0	—	—	0 5 0	0 5 0	—
12000	Tankerville, t, Salop	6 0 0	—	—	0 5 0	0 5 0	—
25000	Terrass, t, St. Austell	1 0 0	—	—	0 5 0	0 5 0	—
6000	Tinctor, t, c, t, t, t	9 0 0	—	—	0 5 0	0 5 0	—
4000	Trumpton Consols, t, Helston	6 15 0	—	—	0 5 0	0 5 0	—
15000	Van, t, Llanidloes	4 5 0	—	—	0 5 0	0 5 0	—
3000	W. Chiverton, t, Perranzabuloe	10 0 0	—	—	0 5 0	0 5 0	—
2048	West Wheel Franchises, t, Illogan	26 13 9	—	—	0 5 0	0 5 0	—
400	West Wheel Seton, c, Camborne	47 0 0	—	—	0 5 0	0 5 0	—
2258	Wheel Arthur, t, c, Calstock	1 0 0	—	—	0 5 0	0 5 0	—
512	Wheel Basset, t, Illogan	5 2 4	—	—	0 5 0	0 5 0	—
5179	Wheel Grenville, c, Camborne	2 14 6	—	—	0 5 0	0 5 0	—
2048	Wheel Killy, t, St. Agnes	2 13 6	—	—	0 5 0	0 5 0	—
4205	Wheel Killy, t, St. Agnes	5 4 6	—	—	0 5 0	0 5 0	—
4205	Wheel Killy, t, t, t, t	3 10 6	—	—	0 5 0	0 5 0	—
500	Wheel Margaret, t, t, t, t	13 17 6	—	—	0 5 0	0 5 0	—
10000	Wheel Mary, t, St. Dennis	5 0 0	—	—	0 5 0	0 5 0	—
1024	Wheel Mary Ann, t, Menheniot	10 0 0	—	—	0 5 0	0 5 0	—
1000	Wh. Mary Hutchings, t, Plympton	2 12 6	—	—	0 5 0	0 5 0	—
80	Wheel Owies, t, St. Just	70 0 0	—	—	0 5 0	0 5 0	—
12000	Wheel Russell, c, Tavistock	1 0 0	—	—	0 5 0	0 5 0	—
15000	Wheel Trigg, s, t, Roche	1 0 0	—	—	0 5 0	0 5 0	—
10000	Wheel Whisper, t, c, Warleggan	1 0 0	—	—	0 5 0	0 5 0	—
20875	Wicklow, c, t, t, t, Wicklow	2 10 0	—	—	0 5 0	0 5 0	—

FOREIGN DIVIDEND MINES.

Shares.	Mines.	Divid.	Last Pr.	Clos. Pr.	Total divs.	Per share.	Last paid
35000	Alamillos, t, Spain	2 0 0	—	—	1 1 9	0 2 6	Dec. 1872
30000	Alameda and Tinto Consols, c, t	1 0 0	—	—	0 3 3	0 1 0	Dec. 1872
20000	Australasian, c, South Australia	7 7 6	—	—	0 3 3	0 1 0	Sept. 1872
10000	Battle Mountain, c, (6240 part pd.)	5 0 0	—	—	0 0 0	0 0 0	—
15000	Birdley Creek, c, California	4 0 0	—	—	0 5 0	0 5 0	—
6000	Burns, t, Germany	10 0 0	—	—	0 9 4	0 6 0	Mar. 1873
12320	Burra Burra, c, t, So. Australia	5 0 0	—	—	56 0 0	0 10 0	Oct. 1872
20000	Cape Copper Mining, t, So. Africa	7 0 0	—	—	11 15 0	1 5 0	Mar. 1873
40000	Cedar Creek, c, California	5 0 0	—	—	0 2 6	0 2 6	Feb. 1873
30000	Central American Association, t	0 15 0	—	—	0 6 0	0 3 0	July 1869
21000	Colorado Territorial, c, Colorado	0 14 0	—	—	0 2 0	0 2 0	Oct. 1872
7182	Don Pedro North of the River	0 14 0	—	—	2 5 0	0 2 0	Mar. 1872
25000	Eberhardt and Aurora, c, Nevada	10 0 0	—	—	1 0 0	1 0 0	July 1871
5000	Emma, c, t, Utah (25,000 fully pd.)	20 0 0	—	—	3 12 0	0 6 0	Dec. 1872
70000	English and Australian, c, t, Aust.	2 10 0	—	—	2 4 0	0 2 0	Aug. 1872
15000	Ferguson, c, California	2 0 0	—	—	0 3 0	0 3 0	April 1872
30000	Flagstaff, t, Utah	10 0 0	—	—	3 2 0	0 3 0	Mar. 1873
20000	Fortuna, t, Spain	2 0 0	—	—	3 4 0	0 7 6	Mar. 1871
5000	Golconda, t, t, t, t	1 0 0	—	—	0 2 4	0 0 4	Oct. 1872
60000	Kapuni Mining Co., t, Australia	1 3 0	—	—	0 1 0	0 1 0	Mar. 1868
20000	Last Chance, c, Utah	5 0 0	—	—	14 0 0	0 10 0	Mar. 1873
15000	Lunatic, t, Spain	3 0 0	—	—	11 6 0	0 1 6	Mar. 1873
7837	Lunatic, t, Portugal (25 shares)	3 0 0	—	—	0 5 0	0 5 0	Dec. 1872
15000	Mammoth Copperopolis of Utah, c, t	10 0 0	—	—	0 4 0	0 4 0	Jan. 1873
5000	Mammoth Chief, t, Utah	10 0 0	—	—	3 0 0	1 4 0	Sept. 1872
12000	Preussische Berg- u. Hutten Aktien, c, t	30 0 0	—	—	12 14 5	1 3 0	Dec. 1872
20000	Pontingband, s, t, France	20 0 0	—	—	1 5 0	0 1 0	Jan. 1873
200000	Port Phillip, t, t, t, t	1 0 0	—	—	4 0 0	0 4 0	April 1872
40000	Richmond Consols, c, Nevada	1 0 0	—	—	6 0 0	0 6 0	Nov. 1872
120000	Scottish Australian Mining Co., t	1 0 0	—	—	1 2 0	0 2 0	Mar. 1873
112500	Sierra Buttes, c, California	2 0 0	—	—	0 12 2	0 5 0	June 1871
60000	South Aurora, c, Nevada	5 0 0	—	—	11 14 0	0 2 0	Aug. 1872
15000	Sweetland Creek, c, California	4 0 0	—	—	0 5 0	0 5 0	Nov. 1872
20000	Tollima, c, t, (6000 sh. are £5 f. pd.)	3 0 0	—	—	26 10 0	5 0 0	Dec. 1872
500	Westphalian, s, t, c, Prussia	20 0 0	—	—	—	—	—

NON-DIVIDEND FOREIGN MINES.

Shares.	Mines.	Divid.	Last Pr.	Clos. Pr.	Last Coll.
50000	Anglo-Argentine, <i>g</i> , s, t (15 per cent. Preference).....	1 0 0	—	—	—
50000	Anglo-Australian, <i>g</i> , Victoria.....	2 5 0	—	—	—
10000	Aruba, <i>g</i> , Dutch West Indies.....	10 0 0	—	—	—
20000	Australian United, <i>g</i> , Victoria [†]	2 10 0	—	—	—
30000	Bellavista, <i>s</i> , Peru [†] (£10 shares).....	6 10 0	—	—	—
50000	Braganza, <i>g</i> , Brazil.....	0 15 0	—	—	—
20000	Camp Floyd, <i>t</i> , Utah.....	10 0 0	—	—	—
45000	Cesena Sulphur Company, Romagna, Italy [*]	10 0 0	—	—	—
60152	Chontales, <i>g</i> , s, Nicaragua [†] (and 12,542 of £1 15s.).....	2 0 0	—	—	—
4000	Clifton, <i>s</i> , Colorado [*]	5 0 0	—	—	—
10000	Crescent, <i>g</i> , Plumas County, California.....	10 0 0	—	—	—
100000	Cuba, <i>g</i> , Minas Geraes, Brazil [*]	0 17 6	—	—	—
7500	East Sheshoan Preference [*] (40,000 ordinary shares).....	2 0 0	—	—	—
35000	Excelsior Hydraulic Gold Washing Co., California.....	6 0 0	—	—	—
60000	Exchequer, <i>s</i> , California.....	1 0 0	—	—	—
150000	Frontino and Bolivia, <i>g</i> , New Granada [†]	2 0 0	—	—	—
50000	General Brazilian, <i>g</i> [*]	1 0 0	—	—	—
40000	Holcomb Valley, <i>g</i> , California.....	0 10 0	—	—	—
10000	Hudson, <i>g</i> , California.....	2 0 0	—	—	—
20000	Imperial Brazilian Collieries, Brazil [*]	5 0 0	—	—	—
20000	I. X. L., <i>g</i> , California.....	5 0 0	—	—	—
60000	Javali, <i>g</i> , Nicaragua.....	2 0 0	—	—	—
11000	Kansas, <i>g</i> , Colorado.....	5 0 0	—	—	—
12000	Lanetosa, <i>g</i> , t, c, Viscaya, Spain (£2 shares).....	1 5 0	—	—	—
150000	London and California, <i>g</i> [†]	2 0 0	—	—	—
75000	Malabar, <i>g</i> , Colombia (45000 issued).....	0 7 5	—	—	—
4000	Malaga, t, Spain.....	10 0 0	—	—	—
30000	Malpas, <i>g</i> , Colombia.....	1 0 0	—	—	—
12000	Manenberg, <i>c</i> , t, t, t, t.....	6 5 0	—	—	—
14000	Montague & Waverley Gold Quartz Crushing Co., t, N. Scot. [*]	2 0 0	—	—	—
6000	Monte Loretto, <i>c</i> , c, Italy.....	5 0 0	—	—	—
51000	New Quibada, <i>c</i> , Venezuela.....	5 0 0	—	—	—
50000	New Rosario, <i>s</i> , Mexico.....	1 0 0	—	—	—
20000	New Zealand Kapanga, <i>g</i> , Coromandel [*]	5 0 0	—	—	—
20000	Newfoundland, <i>c</i> , t (410 shares).....	9 0 0	—	—	—
20000	North American, <i>g</i> [*]	7 0 0	—	—	—
15000	Pacific, <i>g</i> , Nevada (and reduced) [*]	4 0 0	—	—	—
50000	Panalello, <i>c</i> , Chile.....	3 0 0	—	—	—
60000	Pastorena United, <i>g</i> , Italy [†]	3 0 0	—	—	—
50000	Rica, <i>g</i> , Colombia [†] (40000 issued).....	1 0 0	—	—	—
100000	Rosa Grande, <i>g</i> , Brazil [†] (£1 shares).....	0 18 0	—	—	—
25000	Ruby Consolidated, <i>s</i> , Nevada [*]	10 0 0	—	—	—
20000	Russia, <i>c</i> , Orenburg and Uta [†]	10 0 0	—	—	—
25000	San Pedro, <i>c</i> , Chile [†]	2 0 0	—	—	—
30000	Santa Barbara, <i>g</i> , Brazil.....	5 0 0	—	—	—
15000	Silver Plume, <i>t</i> , Utah.....	5 0 0	—	—	—
25000	Silver Plume, <i>s</i> , Colorado.....	1 0 0	—	—	—
25000	Snowdrift, <i>s</i> , Colorado.....	2 0 0	—	—	—
11000	St. John del Rey, Brazil [†]	19 0 0	—	—	—
5000	Star of Nevada, <i>s</i> [*] (12000 issued).....	2 0 0	—	—	—
20000	Tecoma, <i>s</i> , Utah [†]	10 0 0	—	—	—
50000	Thornhill Reef, <i>g</i> , Australia [†]	2 0 0	—	—	—
11000	Union, <i>g</i> , Mexico [†]	25 5 0	—	—	—
60000	Utah, <i>g</i> , s, t, Utah.....	10 0 0	—	—	—
50000	Yorke Peninsula, <i>c</i> , South Australia.....	1 0 0	—	—	—
5000	Yedamamutana, <i>c</i> , South Australia [†]	8 0 0	—	—	—